College & Research Libraries

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In This Issue—

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Halliwell-Phillipps, James Orchard

THE NURSERY RHYMES OF ENGLAND, Obtained Principally from Oral Tradition.

An extensive collection of traditional nursery rhymes popular before 1800. Divided according to type: historical, jingles, proverbs, lullabies, customs, etc. Annotations; App.; Index. *Cited in* Bonser; Haviland; Haywood; Pellowski.

1843/264p./$9.50

Tuer, Andrew W.

PAGES AND PICTURES FROM FORGOTTEN CHILDREN'S BOOKS.

Tuer's well-known and beloved book of pages and pictures is a compilation of title pages, text, and illustrations from English children's books of the eighteenth and nineteenth centuries. 400 Illus.; Index. *Cited in* Haviland; Pellowski.

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The authentic old spellings, quaint type, and delightful illustrations make this a most interesting edition of the famous story that ranks among the English classics. Illus.; App. *Cited in* Haviland.

1881/160p./$6.00

McGuffey, William Holmes

OLD FAVORITES FROM THE McGUFFEY READERS.

This centennial anthology, edited by Harvey C. Minnich, contains the best selections from the series which sold 122 million copies in the nineteenth century.

1936/482p./$10.00

Power, Effie

BAG O' TALES: A Source Book for Story-Tellers.

Presents more than fifty folktales, myths, fables, hero tales and literary tales; the Introduction deals with the importance of storytelling. Illus.; Bibliogs.; Index. *Cited in* Haviland; Pellowski.

1934/340p./$8.00

Hewins, Caroline M.

A MID-CENTURY CHILD AND HER BOOKS.

"A charming recollection of a mid-19th-century Boston childhood and of books that were a special delight as well as a great influence in later life." (Haviland) 35 Illus. *Cited in* Haviland; Pellowski; Sonnenschein. **1926/136p./$4.75**

Halsey, Rosalie V.

FORGOTTEN BOOKS OF THE AMERICAN NURSERY: A History of the Development of the American Story-Book.

"A careful analysis of early American books studied not merely as 'curiosities' but as a means of tracing the progress of American literature for children." (Haviland) Illus.; Index. *Cited in* Haviland; Haywood; Pellowski. **1911/245p./$8.50**

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Editorial

". . . The principal business of a library is to acquire books that are needed either currently or potentially." So runs a key line in the 1967 Annual Report of a large, important university library. Perhaps not too surprisingly, several university librarians on whom I have tested this philosophy have expressed disbelief that anyone would question this statement. The quotation seems to express for all too many academic librarians the keystone of their professional philosophy. The major focus is on collecting materials rather than on developing services.

ACRL is the division within ALA focusing on the academic library as an institution. The Adult Services Division is the division within ALA devoted exclusively to services for adults. Since academic libraries deal almost exclusively with an adult clientele, one could logically expect a heavy representation of academic librarians in ASD. Yet less than 2 percent of ASD members are academic librarians; this fact would also seem to suggest that academic librarians are not sufficiently service-oriented.

On many campuses, students and faculty are becoming increasingly involved in today's social issues. Students have not yet started marching on libraries. Perhaps they see no role for their library in solving social problems. And too often, it seems that many of the campus protesters are grossly uninformed about even the basic facts of whatever social issue they are dealing with.

Academic librarians must be far more aggressive in demonstrating to their communities that their libraries have the information needed to formulate intelligent decisions. The principal business of a library should be to stimulate the effective and efficient use of man's recorded knowledge with the ultimate aim of helping individuals and groups to deal realistically with and develop sound solutions to problems. If this can be accomplished, we may not have to be quite so concerned about future world leadership. In this sense, at least, libraries serving higher education are the change agents about which we hear so much.

Yes, "a library is to acquire books" (and hopefully all other forms of recorded ideas), but the library *begins* there. It is what a library *does*, not what it *has*, that makes it a library.

PETER HIATT

ROSCOE ROUSE

Automation Stops Here: A Case for Man-Made Book Collections

The following paper was read at the Second International Seminar on Approval and Gathering Plans for Large and Medium-Size Academic Libraries, Kalamazoo, Michigan, October 31, 1969. We print it here because its dissenting viewpoint is as timely as it is provocative.

THIS IS INTENDED to be a case study but it may be more than that. A brief affair with an automatic book-buying plan proved a disappointing experience for the Oklahoma State University Library, and it is the purpose of this paper to relate that experience and to consider the reasons why it was unfortunate.

The observations made here have no implications or applications for other libraries. I speak for one library only. The OSU Library experience was a unique one but not an exclusive one; other libraries have discontinued approval and blanket plans.

A brief description of the book selection policy as practiced before the adoption of the plan is necessary for an understanding of the situation. The procedure was a very smooth one, it moved without friction, it was expeditious, and there was little need for conference or discussion between individuals. Each member of the staff involved had his own specific assignment, and he knew what it was; the faculty knew the individuals responsible for selecting in their respective fields and had confidence in them.

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The OSU Library is organized on the divisional plan, and it was the divisional librarians and their staff members (public services personnel) who were responsible for virtually all book selection before the plan was adopted. These were the people who worked with the students and faculty and knew their needs. These were the people who helped undergraduates with their reference questions, who aided the faculty in becoming familiar with holdings in the respective divisions, who serviced the thesis and dissertation collection, who aided graduate students in gathering materials for their theses, who procured materials for them from distant libraries, who knew the holdings of other libraries well enough to direct interlibrary loan requests for a good bull's-eye percentage. Most of these librarians held a graduate or undergraduate degree in the field in which they were working in the library, and all of those involved in the book selection process had long tenure, the average being 14.7 years in the OSU Library at the time the approval plan was instituted. A key member of the staff, although promoted in rank and salary at regular intervals along with increased responsibility, has held the same position and title for twenty-three years.

The book selection routine at OSU was indeed unique. It was tried and found true. There were no complaints of consequence about the acquisition of books and journals, and our files include some letters complimenting the staff on this aspect of their work. The librarians handled about 80 percent of all book selection and the faculty the remaining 20 percent. We sometimes heard faculty comments to the effect that new publications were often ordered before they were aware of the need for them. There was a satisfactory relationship between the librarians and the faculty in the building of the book collection.

The basic book selection tool for current titles was LC proof slips. Upon receipt of the new proof slips, the acquisitions librarian sorted them into categories for distribution to the divisional librarians. Other selection media were used, of course, such as *Publishers Weekly, Choice,* mailed advertisements, dealers' catalogs, reprint catalogs, foreign listings, and specific standard lists such as *Books for College Libraries.* Staff members felt a direct and personal responsibility for the quality of their respective areas and worked very conscientiously to build them and round them out well.

The approval plan agreement was made with a reputable dealer, and the contract specified that the library would be supplied one copy of every monographic U.S. imprint book within categories stipulated as well as all of the library's standing orders. It was the usual kind of arrangement: excluded were general works, juveniles, introductory textbooks, reprints, fiction, medicine, and religion. The staff held the responsibility for selecting newly published works desired in the fields that were excluded and this they did through proof slips and other sources.

Despite the satisfactory situation they were enjoying, the library staff was willing to relinquish the selection responsibility to an outside party so long as they were assured that the job would be done as well, if not better. At the outset I shall admit to the possibility of unfairness in an experience of only four months but also point out the fact that this was one month longer than the agent said was needed to have the plan fully operational and going satisfactorily. The relationship was indeed of short duration but it was not entered into as an experiment; the contractual agreement was a sincere one made on the basis of expected longevity. Full cooperation was given to the effort by the librarians who had every reason to believe that this was their acquisitions procedure for the future and evermore.

In fairness to the dealer, it must be noted that his service to the region was new but nevertheless we did not contract with him on the basis of expecting poor service for this reason. The lack of organization and the obvious use of untrained personnel indicated that the company was not ready to take on customers. The failure can thus be tied in to two basic causes: the good climate that had previously prevailed in book selection at OSU and the lack of good organization on the part of the approval plan jobber. The possibility of future improvement of operations by the dealer was an unknown factor; the satisfactory operation of the system formerly employed by the library staff was a known factor.

One major complaint against the approval plan was that the library found it was at times returning 50 percent of the titles sent. Many of these were already in the library, doubtless the result of an overlap in the staff selection procedure and the new plan but it did give the impression that the books received from the dealer were not new imprints. A large number of books were sent which did not classify in the categories

specified in the agreement. Some titles duplicated others previously shipped by the plan jobber. Still others should not have been sent because they were not monographs but serials. There was also the inclusion of many older titles, a source of real concern to the librarians. These seemed to classify as remainder stock, titles that were in some instances six to eight months old, many shelf-worn and faded. The dealer admitted that he purposely did not order enough books for all his customers, knowing that all libraries did not want all books. He would wait until some had been returned before shipping them to other libraries wanting them, which may account in part for the age and worn appearance of some volumes.

The staff testified to the shipment of every kind of book in or out of designated categories. Received were textbooks, juveniles, reprints, and even some foreign titles. And, of course, there were many books received within categories properly chosen in the agreement which did not qualify as titles needed in the OSU Library. Such titles would not have been selected by the staff under the former procedure and these were returned. The overall quality of books received seemed very poor, especially to librarians who had previously been quite discriminating in the selection of titles. The instructions given for our library simply were not followed.

The librarians were more dissatisfied with the books not sent than with those received. A number of good pertinent titles slipped by the dealer for one reason or another and were not supplied to the library; the staff learned that they could not place complete dependence upon the plan service, and this loss of confidence was the beginning of the end. It was known that the jobber did not have good relations with some publishers. Through all this, the staff was never able to tell a faculty member the status of a book at a given time. Whether or not the dealer would ship a particular title was not known for certain, whereas under the former procedure one could tell immediately that the book had been ordered and its exact status in the order routine.

As the librarians became aware of the newly published books that were not sent by the dealer, they felt the need to make selections from the proof slips in the same manner as before. This was the only alternative to haphazard, incomplete collection building. So it was that the staff found itself back at the old task of selecting books as they had previously done. The all-books plan then became redundant. A ream of correspondence between the library and the dealer gives evidence to efforts by both to resolve the highly unsatisfactory situation. Visits to the library were made by company representatives.

One basic difficulty in receiving books "unsolicited" through a dealer was in regard to bibliographic entry. The Head Cataloger at OSU names this problem as the prime one in the failure of the plan. Prior to using the approval plan, 80 percent of our orders had been made from proof slips and for these no verification was necessary. The books arrived already identified with main entry established, whereas books arriving from the approval jobber required verification of authors and titles. Books were received with multiple order forms prepared but the entries were so unreliable that the staff had to ignore them.

The OSU Library is one of the ninety-seven cooperating PL 480 libraries in the country and therefore receives a depository LC card for every book cataloged by the Library of Congress Cataloging Division or one of the cooperating libraries. Once a book is received in the library it is a relatively easy task, if a proof slip is stapled to the order card in the orders-outstanding file, to find and

pull the depository card, type the call number, and make a full set for the catalog. There is no bibliographical or entry problem encountered.

Books arriving unordered, on the other hand, must be matched with the cards in the depository file. This becomes almost a professional task unless one has a clerical person who has had good experience with corporate entries and other bibliographical intricacies. Books and depository cards did not, of course, arrive at the same time, the cards almost always arriving much later. The books would therefore wait in the cataloging department until the Library of Congress had prepared and distributed cataloging copy for them. These books had to be temporarily controlled unless they were treated simply as not having been received. Cards had to be checked against many shelves of books, or books had to be checked against many drawers of cards over and over again until the docking in space was complete. In other words, each time a shipment of books was received, the books had to be checked with the depository catalog; each time a shipment of LC depository cards was received, these had to be checked with the books awaiting LC copy. A given book might be checked against the depository file a dozen times or more before it was matched with the proper card. In some instances cards never appeared and the searching continued for an extended period, in which case the cataloger would eventually prepare original copy for the book. In short, the processing staff found itself in trouble from the beginning with no let-up seen after four months. The books were not getting on the shelves any faster and additional burdensome tasks were found necessary under the new system. The library was not buying any more titles than before but the processing work was much heavier.

The division librarians, who hold the greatest responsibility for the selection of titles, maintained that the greatest shortcoming of the plan was the narrow bibliographic base upon which the agent operated. The public services librarians found it necessary to search the proof slips anyway, because so many good works were overlooked by the dealer. The agent's staff (or computer) did not send everything in the fields shown in our profile. An example given was concerned with the laser beam. We were in need of everything, literally, published on the subject as a physics graduate student at our institution designed the instrument that sent the laser beam to the moon and back last July. The library found that it could depend upon receiving through the plan only a small part of the material needed because the jobber did not furnish materials from a number of U.S. publishers or from numerous societies, institutions, and associations which issue scholarly publications.

The same librarian who gave the laser beam example said he found it much faster and more satisfactory to choose books from LC proof slips than by using the books themselves. He felt that there was too much time involved in reading tables of contents, prefaces and such, whereas the LC card with its call number, subject headings, and full title gave all that was needed to make a decision, in most cases, especially in the sciences.

The conclusion was reached that only the OSU faculty and library staff knew best which editions the library should have, which publishers were best for specific titles, which editors it preferred. Oklahoma State librarians were better and more currently informed about their degree programs, departmental projects and studies, thesis topics, and specialties of the faculty. There is no time lag in altering the profile when the job is done by a well-advised librarian right at the source of information.

Disenchanted with the whole idea, the OSU Library staff, almost to a man, was pleading to return to the former method of selecting and ordering books. The approval plan was cancelled and the proof slip routines reinstated. When this was accomplished, the staff found that they were still trying to extricate the library from the red tape of the plan a year and a half later. Today the book selection procedure is as good as it ever was. The librarians and the faculty are content with this routine, and they are of the opinion that the development of the collection in the various fields and disciplines is as good as can be expected for a library with a limited budget.

The writer recently received a long-distance call from a million-volume library in the far West. The caller said he needed advice about his acquisitions program. The library had been on an all-books plan the year before but the supplier did not furnish materials as promised. The librarian was unable to answer the faculty's questions as to whether certain titles were coming, and a large percentage of new titles never reached the library. There was much confusion regarding the serials that the dealer should supply and those that would come through the library's own standing orders; it was obvious that the supplier could not differentiate between serials and monographs. The librarian said too much time was wasted in reviewing the books that were received. It was therefore decided to discontinue the plan, and the staff returned to their former method of selection with faculty consultation. The librarian said they soon found themselves in trouble again and were desperately seeking a solution. Further inquiry brought out evidence that the present dilemma stems from a staff shortage. In this case the all-books plan had been turned to as a panacea, which it was not, and a return to the old manual system was a nightmare of another kind—for reasons that were easily identified.

The Council on Library Resources is supporting a two-year study of an experimental model engineering library at MIT incorporating "new technological developments." The physical remodeling alone for the project, which will be carried out under INTREX, has cost $2 million, and the council made grants of more than a million dollars to MIT to support INTREX. The library will incorporate such software as the text access system and the augmented catalog, which is a computer-based bibliographic mechanism utilizing the cathode ray tube to rapidly and interactively search a remotely stored catalog in which each document is cataloged in great depth. The text access system can be used to retrieve those documents from a remotely stored microform file. Programmed teaching machines will also be a part of the library system. We can expect to see a computer age library and retrieval system emerge from this kind of investment and experimentation.

I was interested to know if this, the nation's most forward-looking library (the adjectives are mine), acquires its books through a blanket or approval plan. In my communications with them I almost felt like apologizing for even suggesting a manual procedure in their operations. In correspondence and by telephone conversation with the librarian I received a response which was in good humor but very positively and emphatically stated: the library now employs and expects to continue to employ the manual, individual, and personal form of book selection, all done by members of the library staff and faculty. No approval or blanket plan is foreseen in their library. About 95 percent of the titles are selected by librarians and the remainder by the faculty. This highly mechanized library is quite satisfied with this arrangement, and there seem

to be no plans to change it.

The Stanford University library utilizes about seventeen various blanket and approval plans. Still the library employs a number of librarians who are book selection specialists, a staff which makes up, to use their wording, "a network of acquisitional interests." Their specialists use *Publishers Weekly* and proof slips for selection purposes. How else would a great library system have full coverage from societies and associations, private presses, little-known publishers, U.S. and foreign governmental agencies, vanity presses, the U.N., publications from underdeveloped countries and near-print materials? Such a vast selection and acquisitions program could not today be successfully handled *in toto* by a commercial firm, even seventeen of them.

David O. Lane, in preparing his paper "Approval and Blanket-Order Acquisitions Plans," queried sixty-six medium-size academic libraries and received forty-six replies.[1] Thirty-one of those replying used approval plans (three of these were dissatisfied, two undecided). Thirty-eight of those replying used blanket-order plans (five of these were dissatisfied, four undecided). Some of the reasons given for the dissatisfaction by those who expressed it were as follows: serials present a problem, duplicates were received, too much junk was received, too limited, takes too much time, pertinent books not received, late receipt, guidelines not followed, and problems in billing and invoicing.

In regard to Lane's inquiry concerning the satisfaction of the faculty with the plans, only thirty-nine librarians out of the forty-six who responded gave an answer and twenty-eight of these replied in the affirmative. It is interesting to note that his research showed that the median percentage of current imprints added by the operation of the approval/blanket order plans in these libraries was 28 percent. The largest number of those on the plans indicated their interest in retaining them and most expected to expand to other plans. Three libraries expressed their intention to do away with blanket orders.

In the Summer 1969 issue of *Library Resources & Technical Services,* Ian Thom wrote of the added work involved with blanket and approval plans.[2] "This method of procurement," he wrote, "other things being equal, does not result in 'less work' for the acquisitions people. On balance, the acquisitions department will require more man-hours to process a given number of titles received on blanket order than it would if these same titles were ordered conventionally." He modified his use of the word "acquisition" to exclude the selection of books, meaning procurement only. He further says, "While it eliminates some operations, however, blanket ordering creates others."

Margit Kraft in her paper, "An Argument for Selectivity in the Acquisition of Materials for Research Libraries," makes the point that the machine will undoubtedly handle quantity for us better but that it does not differentiate between quantity and quality, noting that this requires human intellect.[3] She points out the fact that one feels like a heretic even to question the arguments put forth by virtually all U.S. academic libraries for the building of giant book collections and goes on to say that the urge to preserve an object assumes it has value. Her paper is a sound and solid treatise which will give most of us pause regarding our use of all-books-current plans as we acquire, process, and preserve at great cost the good, bad, and indifferent.

Gordon Williams published a study in 1966 in which he refers to a source which asserts that the technology library at Northwestern University could be re-

duced by 75 percent and still satisfy 99 percent of its present users, and the general library could be reduced by 60 percent and satisfy 99 percent of its users.[4]

At the Symposium on Approval Order Plans sponsored by the Pacific Northwest Library Association in 1967, the fact was brought out that United States libraries acquired twice as many books in 1966 as they did in 1960. The rate of increase between 1965 and 1966 was 29 percent. About fifty new institutions are established each year and by 1975 academic libraries will be spending $300 million a year for materials. Perry D. Morrison said at this conference, "We hope that the computer's tail will not wag the intellectual dog."[5] He points out three advantages to using an all-books plan and seven disadvantages, including the fact that the automatic plan builds an uncritical collection, and he remarks that one becomes too dependent upon a single supplier and "subject to the tyranny of his computer." The writer, a faculty member himself, said he did not feel that his interests were being served if it were all to become automatic and superficial.

At the same conference, LeRoy C. Merritt presented a paper entitled "Are We Selecting or Collecting?" in which he said, "My contention is that the quality of the collection produced, not the promised increase in efficiency or ordering procedures, is the true issue."[6]

When the Michigan State University library left the divisional plan of operation, Dr. Richard Chapin lamented the loss of the advantages that plan offered in the development of the book collection.[7] He said he found it necessary to redefine their efforts for resource development, and specific discipline assignments were passed out to members of the staff. A book selection department was created in the library.

A recent issue of *College & Research Libraries* includes a paper titled "Book Selection in Academic Libraries: A New Approach," by J. G. Schad and Ruth L. Adams.[8] These writers advocate a working combination of faculty and librarians to build the most satisfactory and relevant book collection. There is no reference whatever to any kind of approval or blanket or all-books plan.

A complex operation can be automated if it is consistent and standardized. Book selection is neither. The information flow emanating from large numbers of books as they are issued forth is made up of many unique and varying parts with shades of difference that may be extremely important to a particular library situation. A machine cannot deal properly with this kind of fluctuating subject matter, with linguistic and semantic materials; at least the machines in use today cannot. A book is the result of the thinking process of a man, and a machine will treat words just as though they were static, inflexible, sterile, categorical bits; the human mind extracts much more than this from the printed page. It is almost as though one were attempting to put a man's thinking process into a machine for recall as needed. We may try, but I hardly think we can be successful, really successful, in building a good, really good, library collection by automatic book selection alone. We can, I think, do this very well with a combination of machine and human intelligence.

The OSU Library approval plan experience was an unfortunate one, but it did occur at one point in time under a specific set of circumstances. Today it might well be that those circumstances do not exist and the same set of problems would not arise. The OSU Library may very well one day come back into the fold and employ some kind of gathering plan, but if we do, I think we shall still use the human touch to tailor a book collection to fit our own particular needs.

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JASPER G. SCHAD

Allocating Book Funds: Control or Planning?

Allocating book funds in academic libraries originated principally as a device to control powerful departments and prevent them from monopolizing funds. For this reason, present methods for apportioning book budgets often bear little relation to the needs of the collection. Identified or projected book needs are the only valid criteria for determining the use of such funds. Utilizing new budgeting and bibliographic techniques, academic librarians can approach allocation more objectively. This involves a three-step process by which planning and bibliographic research replace control and focus on the actual needs of the collection.

ALLOCATING BOOK FUNDS by department became common practice in academic libraries toward the end of the nineteenth century. This procedure originated primarily as a control device to prevent monopolization of book funds by particularly active or powerful members of the teaching faculty. Before funds were apportioned, it was not unknown for the teaching faculty to fight over library money. It sometimes became necessary to appoint committees to resolve these disputes. A solution frequently adopted by these committees was to assign a definite sum to each department. In spite of hopes that this would reduce most of the animosity, complaints and challenges continued. In an attempt to defend their decisions, it became almost uniform practice for committees to base allocations on some form of historical data. Although each institution used somewhat different data, several factors were normally considered by most colleges and universities.

Book use as a measure of need was sometimes calculated simply and directly on the basis of circulation statistics by department. However, because it was difficult to relate circulation to the various departments, other data were more frequently used. For example, allocations were often based on the total number of credit hours registered for each department, weighted by level (lower division, upper division, graduate), or the courses in each department were weighted on the basis of estimates of library dependence. Other institutions measured book use by the number of faculty members or the number of theses, dissertations, and publications written annually by the students and faculty of each department.

The rate of publication was often taken as an index of budgetary need. Each year new publications were reviewed, and relevant titles were assigned to departments. The number of books for each department times the average cost, established a percentage of the total

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budget for each field.

Attempts were often made to consider the needs of the collection. Evidence frequently cited included the number of unfilled requests on hand, expenditures for previous years, each department's percentage of the total collection, the number of new faculty members or new courses, as well as subjective judgments about the strengths and weaknesses of the collection.

As imprecise as these factors were, they did help to make allocation more equitable. Discontent did not subside, however, and it was not until the thirties that the next advance was made. Those years were marked by an increased interest in statistics. Statistical techniques were utilized to devise a number of mathematical formulas for apportioning book funds. They were based on various factors, each of which was assigned a numerical value. The sums of the factors for each department were added, and a percentage of the total became an index for each department's share of the budget. Formulas were more impartial and, in that sense, they did represent a step forward. For this reason, library committees welcomed formulas. However, few librarians exhibited much enthusiasm for them because judgments about which factors were significant and their relative importance were still subjective ones.

Since the development of formulas, procedures for allocating funds have changed very little, and all of them share two major defects: (1) the specific needs of the collection are seldom considered directly, and (2) attitudes of control are still dominant. Each department's share of the budget is calculated from indirect evidence of need, which usually takes the form of a statistical summary of past experience. However, such experience is not necessarily a reliable guide to current or future needs. It is valuable only insofar as it is analogous to the present. Librarians and library committees have misused historical statistics by constructing what seemed to be reasonable budgets, but without analyzing or questioning the data or their relevance to the present. The second defect is equally serious. Because the major concern of library committees was to curb overambitious book selectors and prevent departments from getting more than their share of the budget, attitudes of control rather than the needs of the collection dominated budgetary thinking. Therefore, the process of allocation has not contributed toward effective use of funds, and few librarians have done anything to improve matters. What efforts have been made were normally limited to insuring a degree of budgetary flexibility and library control by establishing funds for the purchase of general books, reference books, periodicals, and perhaps current books, as well as reserve or contingency funds for special needs or purchases. The remaining funds were left to library committees to apportion as they saw fit.

Many librarians recognized these defects and also associated the process of apportioning funds with control of book selection by the teaching faculty. As a result, some rejected the whole idea of allocation.[1] Nevertheless, allocation can play an important part in the process of collection building. The solution, therefore, is not to reject allocation, but to replace traditional methods with an approach that is not dominated by the special interests of the teaching faculty but focuses on the real needs of the collection. Until recently there has been no theoretical framework to assist librarians in developing such an approach. Two developments significantly altered this situation. The first involves the use of new concepts of budgeting that are gaining increased acceptance not only in business and government, but also in the academic world. In government, tech-

niques for allocating resources in limited supply during World War II provided a theoretical basis for further applications. In 1961 program budgeting was introduced into the Department of Defense, and in 1965 all departments of the federal government were directed to develop similar budgeting procedures.[2] Program budgeting contrasts sharply with traditional budgeting, which focuses on objects of expenditures and is marked by attitudes of inertia and control. On the other hand, program budgeting is an objective-oriented, planning process by which available resources are organized to achieve specified goals. Because funds are seldom if ever adequate, financial implications of these goals must be considered. This involves assigning priorities to the component parts of the plan. A time dimension may be required for projects that cannot be completed within a single budgetary period. Programs must be under continuous review in order to clarify needs, and to improve and refine the planning process.

The second development involves the emergence of bibliographers, or librarians specializing in collection building. Until recently college and university librarians were not sufficiently involved in the affairs of the academic communities they served. Nor were they competent to assess the quality of library resources. Therefore they were not able to contribute significantly toward defining needs or developing collections in their libraries. However, in the forties academic administrators became seriously worried about the seemingly endless financial requirements of libraries and the acquisition of obsolete or little-used material. Librarians began to recognize the importance of planning, and they realized it was necessary to define the amount and character of the literature needed to support educational programs.[3] At the same time, there was increased pressure on the teaching faculty to publish. This caused them to devote more time to research and less time to activities such as book selection. In addition, library budgets began to grow more rapidly than ever before. All these factors forced academic librarians to assume greater responsibility for collection building. A number of specialists emerged who gradually developed techniques for systematically evaluating and developing collections.

These new budgetary and bibliographic concepts can be effectively combined to produce a method of allocating that reflects the needs of the collection. A three-step process is involved: (1) formulating collecting goals; (2) identifying specific needs; and (3) determining dollar requirements.

The library's responsibility is similar to other schools and departments in that its collection must be designed to support educational objectives in the same way as specific degree programs and course offerings. Because educational goals determine library needs, librarians must be involved in campus-wide planning. They must translate the goals of the academic community into programs for developing library resources. The first step involves establishing the proper level for each area of the collection. Although there are an infinite number of levels of collecting, they may be divided roughly into four different categories: (1) a core collection of books, which all academic libraries should have regardless of their educational programs; (2) a collection to support undergraduate instruction; (3) basic research collections to support graduate programs; and (4) comprehensive research collections to support advanced research.

The appropriate level for each part of the collection can be established only after careful analysis of every significant factor bearing on library needs. Although these may vary from institution

to institution, they are generally as follows:

1. *The nature of the instructional programs.* The educational objectives, the type of students being trained, the degree programs, as well as specific course offerings are all basic factors. Instructional methods are related to these, and they are perhaps the single most important determinant of the nature and scope of library use. Programs that emphasize individual learning are heavily dependent on the library, whereas those that utilize the lecture-textbook method often make little or no use of the library.

2. *Research objectives.* Most academic libraries are under considerable pressure from the teaching faculty to support their research interests. Those with limited financial resources have often neglected undergraduate needs. Because of this many libraries have developed mediocre and unbalanced collections. Libraries that cannot maintain strong basic collections should not undertake to develop specialized holdings. Because only a few institutions can aspire to strong research collections in all fields, acquisition of research material must normally be limited. Decisions about which areas to support and whether to build basic or comprehensive research collections should be based on the overall objectives of the university, graduate degree programs, requirements of institutes and research bureaus, as well as the specific interests of individual members of the teaching faculty and research workers. The library must define areas of emphasis within each discipline and restrict acquisition of research material to those fields. This insures the availability of sufficient material for research purposes although the range of subjects is limited.

3. *Area resources.* The existence and accessibility of comprehensive research collections can and should affect decisions regarding acquisitions programs. Funds should not be used to duplicate expensive or infrequently used resources that are already easily accessible.

Once needs have been evaluated and the appropriate level defined for each segment of the collection, the bibliographer must determine specific requirements for building or maintaining holdings at the desired level. This information is essential to any effective method for allocating funds. Identified or projected needs are the only valid criteria on which to base budgetary decisions. Three steps are involved in the process of defining needs: (1) determining the relative importance of monographic, serial, periodical and other material; (2) evaluating existing holdings for adequacy; and (3) selecting specific titles.

Ideally, all three steps can be accomplished at the same time by utilizing selective, authoritative bibliographies, which approximate the desired level of adequacy. By comparing the entries with existing holdings, the overall adequacy of the collection is established and specific deficiencies are identified. Frequently, however, there is no single bibliographic source which is suitable. In such cases, the bibliographer must rely either on a series of specialized bibliographies or on a comprehensive bibliography. Still other fields lack even these guides and the bibliographer must depend on a variety of other sources such as national bibliographies, book catalogs, accessions lists, citations, review media, bookseller's catalogs, or studies dealing with the literature of the field being evaluated.

The third step is to translate identified needs into specific dollar amounts, and to plan sufficiently far in advance to insure full consideration of financial requirements. In developing cost data, two

sets of figures are necessary: (1) a basic allocation; and (2) an augmentation. The basic allocation reflects the sum necessary to support or maintain the collection at the desired level. This will include funds to purchase currently published material[4] and to fill in minor gaps. Figures for current books are calculated on the basis of the anticipated rate of publication and the projected unit costs. Funds in this category will remain fairly stable from year to year, adjusted to changes in the rate of publication and cost, or to modifications in the scope of collecting. The augmentation is intended to develop the collection to a level of adequacy by providing support for the purchase of titles identified in systematic bibliographic surveys. In most academic libraries, the level of adequacy is continually changing in response to a variety of factors, such as new degree programs, course offerings, faculty members, and research projects. Furthermore, increasingly detailed bibliographic research in each field will normally identify additional weaknesses. Cost estimates should reflect the percentage of titles that are in-print and out-of-print as well as the average price for each category. Often projects must be extended over a period of years owing to limited budgetary support, or because substantial amounts of the titles are out-of-print and cannot be obtained during a single budgetary period. Therefore, while the basic allocation remains relatively stable, the augmentation fluctuates considerably from year to year. Funds are allocated for specific purposes and, when one acquisitions program has been completed, funds can be diverted to other projects. Projects involving large amounts of out-of-print material are different in that a decreasing number of titles can be located in the antiquarian market with each successive year. In such cases, funds can be gradually reduced over a period of years.

In summary, allocating book funds should not be a control device, nor a matter of campus politics, nor the result of well intentioned but ill-informed judgments about the nature of library resources needed to support instructional programs. Nor is this simply a matter of objectivity as opposed to subjectivity, for complete objectivity in evaluating books and book needs is illusory. It is a matter of reducing as far as possible the degree of subjectivity that has traditionally influenced the allocation of book funds. For this reason, allocation should be the result of academic and fiscal planning that expresses identified needs in terms of dollar costs. Assessments must be based on thorough bibliographic research and continual evaluation of the collection. While it is easy in theory to define such an approach, it is hard to do in practice. Yet the attempt is worthwhile. This approach alone forces the academic community—librarians, administrators, and teaching faculty alike—to approach the use of library funds in terms of what must be provided in order to support educational programs.

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LUCINDA CONGER

The Annex Library of Princeton University: The Development of a Compact Storage Library

Forced by the pressures of space to venture into compact storage, Princeton developed its unique "open stack" compact storage library, the Annex Library, after examining modes of storage used by other libraries. Influenced by the importance of maintaining good public relations with its users and of interfering as little as possible with existing cataloging practices, Princeton made "reversibility" the chief advantage of its selection and processing systems. This paper deals with the decisions made and the methods used to organize the Annex Library, with the building itself, and the selection, cataloging, and retrieval procedures.

The Idea of Compact Storage at Princeton

The Princeton university library system consists of a central building, the Harvey S. Firestone Library, in which the university's basic book collection is housed, and eighteen special subject collections located in buildings elsewhere on campus. The Firestone building opened in 1948. Its open stack arrangement was designed to be flexible and expandable, but expansion for book shelving could only be carried so far. Provision had to be made for reading areas, carrels, and personnel offices; for expansion of the preparations areas and of the main card catalog. Gradually, with the growth of the book collections all over the campus, the Firestone building became a depository for materials for which the subject libraries did not have room, and for books for which future buildings are planned, as is the case with the Oriental language collections.

As early as 1959, the library administration expressed concern about the problem of housing its burgeoning book collections. At the time, William S. Dix, the university librarian, pointed out in a memorandum to the faculty and trustees that the Firestone Library, which had opened only ten years earlier, would be filled to capacity by 1965, and that almost all of the special subject collections were already plagued by overcrowding. With the construction of new facilities, space pressure in many of the outside libraries would be eased considerably, but the situation in others and in Firestone would only worsen with increased acquisitions due to plans to broaden the curriculum and to expand the graduate school.

Emergency measures had to be undertaken to forestall the anticipated overcrowding, since an addition to the Firestone building could not be made

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immediately. Three alternatives were suggested:

1. participation in some cooperative storage or deposit venture with other libraries in this area, a procedure through which seldom-used volumes might be transferred to a jointly owned building not necessarily in Princeton;
2. the conversion of a part of the Firestone building into a closed-stack, compact storage area in which seldom-used books might be shelved according to size, without regard to classification and much more economically than in the present classified arrangement; or
3. the erection somewhere on the edge of the campus of a comparatively inexpensive storage library for the housing in compact fashion of our own seldom-used books.[1]

Mr. Dix went on to analyze the advantages and disadvantages of each alternative:

> The first is perhaps the most desirable, since it carries with it the possibility of intelligent cooperative acquisition policies which would serve through the years to reduce library costs in all cooperating institutions. Experience indicates, however, that there are tremendous difficulties to the actual realization of such a plan in this area. I shall make it my business to keep informed and to explore all possibilities which seem reasonable. The second alternative, a compact storage area within the Firestone building, seems to me unwise; it would negate the whole educational philosophy behind the open-stack building and would use expensive space for a purpose which much less expensive space would serve. Therefore we have rejected this approach and propose that this building be considered a completely open-stack, classified library until it approaches saturation, when some policy of systematic retirement of less used volumes to other less accessible areas should be instituted. The third alternative, an inexpensive storage building on inexpensive University land, thus seems at the moment to be the most likely solution of the long-range growth problem.

Compact Storage Elsewhere

Compact storage in the United States is a fairly new idea. In Great Britain and Europe, there is a long history of storing books by size in high shelving with narrow aisles. Books are arranged in fixed accession order, without regard to subject matter; direct access to books is necessarily closed to the public. In the United States, creation of cooperative storage facilities was considered as early as 1903 by President Eliot of Harvard, but the idea did not develop until the 1940s when the New England Deposit Library was opened.[2] The participating libraries could rent space in an inexpensive warehouse building located in the Brighton section of Boston and there deposit their little-used monographs, newspapers, and periodicals in an arrangement of their own choosing. Each library keeps its own record of books deposited and contributes to a union catalog for the complete holdings of the building. Duplication of deposits could thus be avoided and valuable space spared.

The Mid-West Library Center,[3] established in 1951, stores books in six size groups on movable ranges. Now called the Center for Research Libraries, it actually assumes the ownership of the materials deposited by the participating libraries.

Yale University's "selective book retirement program"[4] was begun in 1952. Books are shelved in "double-faced" stacks 7′6″ in height with 22″ aisles. The books are shelved by size in six sizes, with volumes in the first four size groups, 5″ to 9″ in width and not more than 12″ high, shelved on their fore-edges; volumes in the fifth group, 12″ to 16″ high, are shelved upright; and volumes in the sixth size group, over 16″, are shelved flat. Shelves are completely

filled, with no room for insertion; books are assigned a fixed location number within their size designation. All trace of the original classification is obliterated from the book and from the catalog cards for the book. The storage number must also be typed on these cards, creating a heavy workload of cards being removed from the catalog and being refiled. All record changing procedures are performed by experienced members of the university library cataloging department, which often causes a backlog in the regular workload of the cataloging department. As the record changing procedure is so permanent, the importance of accurate and careful selection of books for storage at Yale cannot be overemphasized.

Similar procedures are followed at the New York Public Library, whose book storage program began in 1956, and by the Union College library.[5]

The Annex Building: Theory and Construction

Unlike the other storage facilities just described, Princeton's Annex Library has been developed as an open stack library. The preservation of "browsability," while attempting to provide compact shelving of books, was the primary goal of the planners and architects of this building. The library was designed by the firm of Warner, Burns, Toan and Lunde (New York) and was financed in part by federal funds. It was built on relatively inexpensive University land about a mile and a half from the main campus, at Princeton's James Forrestal campus. Construction on the Annex building was completed in the autumn of 1968.

The original plans for the Annex Library, which called for a separately maintained office, a reading room, a sorting room building, and a warehouse structure for 500,000 volumes, all linked by a corridor, had to be scrapped because of the expense involved in such a design. A modified arrangement, in which the office and reading room are incorporated within the warehouse structure itself, was devised to lower the cost of construction. It also cut the capacity of the building by 100,000 volumes. Locked storage space is provided, too, within the shelving area for rare books, manuscripts, and university archives. The modified plan also diminished the amount of floor space that these library sections so badly need. The building, however, can be expanded in the future, either by extending the floor space of the building on its present site, or by building a second tier of stacks. The heating/air-conditioning system will permit year-round temperature control, set at about sixty degrees, as well as humidity control, in an effort to keep dust and deterioration to a minimum.

Shelving Plan

The principle of "browsability" is maintained in the Annex Library by shelving books by classification within size. Compactness in storage is achieved by shelving books in six sizes. Unlike the Yale system, the determining dimension of a book for sizing is its height. According to a Purdue University study, five "properly chosen heights could increase capacity by 53 percent" over average library shelving.[6] Originally, only five sizes were considered, based on size samplings done at Brown University, Yale, and Princeton. These five represented height maximums of 7½", 8½", 9½", 12½", and 16½". However, as the metal-clip, adjustable warehouse shelving could only be adjusted on 1½" centers, it was necessary to adapt the sizes to the shelving. The resulting size categories are as follows:

Up to 7½"	Representing 10.7% of the shelving
7½" to 9"	Representing 20.9% of the shelving

9″ to 10½″	Representing 35.5% of the shelving
10½″ to 13½″	Representing 24.3% of the shelving
13½″ to 16½″	Representing 4.5% of the shelving

All sizes have a finger deflection allowance of ⅜″. The sixth size was added later to accommodate books over 16½″ tall. These books are shelved flat.

The stack ranges are about 8½′ tall, which means that the usable shelves range from ten for the smallest size to five for the largest. In the first two sizes, books are shelved from both sides of a single 12″ shelf. The books in the third size are shelved double on a 14″ shelf. Thus, the space ordinarily wasted between books shelved singly on double shelves is eliminated, except in the two larger sizes where the width of the book, being proportional to its height, warrants the use of the full shelf width for a single volume. The width of the aisle in the first three sizes is about 22″. Aisle spacing is wider in the larger sizes where books are shelved as conventionally, on a double-shelved stack range, but even here the aisle width is still less than the normal stack aisle.

Operation

The Annex Library is open from 8:30 A.M. to 4:30 P.M., Monday through Friday. It is staffed by two experienced shelvers who alternate with each other, each working one week in the Annex and one week in the Firestone Library. (They do not work at the Annex at the same time.) Each man can therefore spell the other on holidays and vacations.

It is the responsibility of the shelver to shelve all books sent to the Annex for storage, to retrieve books requested, to maintain the circulation files, to host and assist visitors in the building, and to charge out books directly from the building. More will be said later about the components of retrieval.

The Annex Office in Firestone Library: Function and Operation

The selection and processing of all books sent to storage is handled by a central office in the Firestone Library, as the office must be close to the main card catalog and the shelf list for the entire campus, as well as accessible to the people, departments, library sections, and special collections with which it works. This office coordinates the selection of the books. It also works with the various processing departments of the library: the cataloging department, the bindery, the additions and transfers section, rare books, circulation, and reserve, without being a part or subdivision. The Annex office is staffed by a professional librarian, who is charged with setting up the procedures to be followed and settling policy questions, and by one nonprofessional assistant, who processes books and book records.

Selection: Why, What, and How

There are two basic principles followed in selecting a book for storage. These principles, suggested by studies at Yale and the University of Chicago, are recency of use and age of material.[7] During the process of selection, they are often interrelated, in that old works are very often the most unused books in a subject. However, this is not necessarily so. A volume of Aristotle's works published in the seventeenth century may be in constant demand for the history of science courses, while a modern science text may be selected for storage because it contains outdated information which could misinform a reader. (The latter should not be discarded, as it may become tomorrow's history of science text.) In general, however, the following guidelines are followed: (1) little or no

use in the past ten years, as indicated on the circulation cards (primary guide for monographs); (2) publication prior to a certain date, the date varying with subject and content of the material (primary guide for serials); and (3) superseded editions.

It has been found, however, that even with such guidelines, it is best to consult those who know and use the books, as the best guideline is no substitute for intimate awareness of the currents of interest and study within a discipline. Hence, three modes of selection have been set up: (1) direct faculty selection: a faculty member examines the books in his field at the shelves and makes a list, by call number, of those he thinks can be stored; (2) librarian selection subject to faculty review: a knowledgeable librarian examines the books at the shelves, selects those to be stored, places them on a book truck to be displayed for about a week during which time the faculty may remove those volumes which they judge should not be stored; (3) librarian selection: a knowledgeable librarian examines the books at the shelves and makes a list by call number of the books to be stored.

These selection techniques are, however, not without flaw. There have been problems with interdepartmental conflicts of interest. Thus, a man in the history department may desire that a book which was selected for storage by someone in the classics department remain available in the stacks. It has been necessary, therefore, to provide for flexibility within selection and, subsequently, processing methods. The Annex Library tries to be as amenable as possible to reversal of selection. If a book is requested by two different borrowers during one year, or if a librarian requests that a book be transferred elsewhere, or if a justified student complaint is registered, the book in question will be withdrawn from storage or "de-Annexed" and returned to the stacks.

As books are examined for possible storage, others which ought to be discarded are also sought, especially unnecessary duplicate copies. There may also be in the stacks material which would be of interest to the Center for Research Libraries. The criteria for selection for the Center are that such material be: extensive in bulk, not especially needed on campus, not commonly available in other libraries because of the difficulty or expense of its acquisition, and infrequently, though sometimes extensively, used.

There are, therefore, four alternatives facing the book selector when he examines books at the shelves: to leave the book on the shelf; to store the book; to withdraw the book; or to send the book or set of books to the Center for Research Libraries.

By the time the Annex Library opened for business on November 18, 1968, 36,460 volumes, 240 archives boxes, and other cartons belonging to various library departments were stored on the Annex shelves. Since then, there have been an average of 4.1 requests per day for materials from its shelves.

The largest number of books selected so far are in the subject of religion. Other subjects represented are: general periodicals, classics, sports, oratory, psychology, education, biology, geology, chemistry, economics, industrial relations, theatre arts, and music.

Preparation of Books for Storage

Books which have been selected for storage may be sent directly to the Annex office for processing, where they are arranged in call number order so that a list of call numbers can be compiled. Or, a list of the call numbers may be given to the Annex librarian, whose staff will then gather the books from the stacks. This list of call numbers becomes, in the processing procedures, the master rec-

ord of all transactions involving each call number.

The first step in the preparation of books for storage is to measure them. Five wooden sticks, each the maximum height of one of the five height categories, are used for this purpose.

Princeton's size categories are designated by the roman numerals I, II, III, IV, and V. In the original plans, the designations were alphabetical A, B, C, D, and E, but these were changed because of the possibility of confusion with the Library of Congress classification. Books which measure over 16½″ are labeled "Elephant." Books which measure in different sizes, although part of the same set, are assigned to the different sizes, togetherness being subordinate to compactness.

The size for each call number recorded on the master sheet is written next to that call number. A small "self-adhesive" label, about ½″ by ⅞″ is affixed to the spine or front cover of the book, to show the roman numeral size category in which the book should be shelved. In case this label comes off, ANNEX LIB. is stamped on the inside cover of each book where its call number is again noted, should the call number on the spine be unreadable. A smaller stamp, ANNEX, is stamped on the circulation cards, in order to distinguish the normally circulating Annex book from other books which circulate for different periods of time. If a book has no circulation cards, none are made until the book is circulated.

When a request to de-Annex a book is received, the adhesive label is removed from the book, the ANNEX LIB. stamp on the inside cover and the smaller ANNEX stamp on the book cards are crossed out. The book is then ready to be reshelved in the open stacks.

Cataloging and Record Keeping

The simplicity of Princeton's storage procedures derives from the fact that no change is made in the given identification of a book. The classified call number is retained as the primary element needed to identify and locate each book in storage. The size of book is the second element needed because, as mentioned earlier, books are stored in classification order within each size.

Because books selected for storage are removed from assigned and known locations in the stacks, it is imperative that all cataloging records for each title (*i.e.*, shelf list card, main entry card, and all secondary entries) show the new location as quickly as possible. A complete record for all books in all the Princeton campus libraries is kept in the Firestone Library, where books are centrally cataloged. Each outside library also maintains its own main and secondary entry file; cards in these files, too, must show the new location of books transferred to the Annex.

The Annex staff can indicate this transfer in all the above-mentioned records without removing any card, except the main entry card from the public catalog in Firestone, and without writing on any card, except in a few special instances. This is accomplished by slipping a pre-printed plastic envelope or "card protector" of .002″ Mylar (Demco #28-681) over every card as indicated in the tracings on the main entry card. The slip is imprinted within ½″ or ¼″ from the top of the slip with a roman numeral for the size, the Annex location, and brief directions for retrieval. The great advantage to using these slips is that by simply removing them from the cards a book is reinstated to its former position in the library. The greatest disadvantage is that their use expands the catalog by one inch for every 250 cards slipped. Postulating five as the average number of cards per title, these figures indicate that the catalog will expand by one inch for every fifty titles stored.

The Annex Library's record of books in storage is its shelf list, a classified card arrangement in which the sizes are interfiled. It is used not only to check whether a title is in the Annex but also as a cross-reference from call number to size. The call number, author, short title, place and date of publication are typed from the library's shelf list. Besides bibliographic information, a card may indicate multiple volume and copy information. The size designation is taken from the master sheet and marked in red ink on the typed card. The shelf list card from which each typed card was copied is slipped with an appropriately sized plastic slip. The typed cards are then used in the record changing process at the catalog, after which they become part of the Annex shelf list.

The basic processing routines are explained in the "Annex Library Procedures Manual," useful especially in training new personnel and for maintaining uniformity.

The average cost of processing an Annex book and to change the catalog record is forty-eight cents. This price includes the cost of supplies, as well as of labor. The average was obtained by combining the cost of the labor of the professional and nonprofessional workers, as both perform the book-processing operations.

Transportation

Most books are sent to the Annex Library on large 54½" by 42½" book trucks aboard the library's mail delivery truck. If the books are fairly small, more than 400 volumes can be shipped at once. This method of transport requires, however, the existence of docking facilities, which are available at both the Firestone Library and the Annex Library. Branch libraries without docking facilities must send their books in boxes to the Annex office in Firestone, where they are processed and then sent to storage on the book trucks.

Components of Retrieval

Retrieval of books from the Annex Library operates on a principle similar to interlibrary loan. An individual at the main campus may either borrow a book directly from the Annex by going there himself or he can borrow the book through one of the campus libraries. Most circulation from the Annex is indirect—from the Annex to a campus library and subsequently to the borrower. Annex books circulate to any authorized borrower regardless of status for the duration of the academic year. This policy was established to make the use of Annex books more attractive, especially to those borrowers whose loan period is normally limited, such as undergraduates and graduate students. Like other library books, an Annex book is subject to recall for another borrower after it has been charged out for two weeks.

Several forms of communication between the main campus libraries and the Annex were explored before the method now used was chosen. The main requirements for any communication equipment were: (1) that it not require the presence of the shelver who cannot always be in his office; (2) that it be available to all the campus libraries; (3) that it not be prohibitively expensive. The ordinary telephone was eliminated by the first requirement. Simple variations of it—extensions and loud bells for the storage area were thought to be too clumsy, interrupting and perhaps startling the shelver in the middle of his work. Facsimile transmission was eliminated by requirements two and three. It would be too expensive to place transmission units in each of the campus libraries, although this means of communication was considered to be the least error-prone. In the end, it was decided to use the Bell System's "Electronic Secretary," a telephone-answering and re-

cording machine. It requires only a regular telephone to transmit information from the campus libraries; it records and holds spoken book requests until the shelver has time to take the messages, and is fairly inexpensive to lease ($28.80 per month).

In order to avoid abuse of the recording device, its extension number is given out only to those circulation departments or services, such as interlibrary loan, which regularly request Annex books. It has been found that this machine works well for the purpose, despite the disadvantages inherent in delivery of messages by telephone.

In addition to the "Electronic Secretary," there is another telephone, whose number is available to the public. If the shelver is not in the office, however, this phone goes unanswered.

Books are carried between the main campus and the Annex Library twice a day, once in the morning and once in the afternoon. Therefore, the waiting time for a normal Annex book request is never more than twelve hours for a book wanted at the Firestone Library and rarely more than twenty-four hours for a book requested by other campus libraries.

Conclusions

The fundamental principle underlying all policies formulated for the Annex Library is to make the idea of compact storage as attractive as possible to all concerned. From the beginning, the Librarian consulted with the faculty and the library trustees on the subject, always keeping them informed of new developments, with the hope that an enlightened public will be an understanding one. In light of this principle, the importance of such key elements as the following cannot be overemphasized.

Factors which were deemed important to faculty, student body, and other users of the library included: (1) selection with faculty assistance or review; (2) reversible selection; (3) quick retrieval time; (4) browsability: retention of open stack concept; (5) slipping all catalog records to show Annex location; (6) direct circulation from the Annex Library, as well as indirect circulation; (7) full academic year loan period, regardless of status.

Factors which were considered important to librarians and library administration included: (1) no change in established cataloging and classification; (2) all work done by an independent department; (3) fast adjustment of all cataloging records, so that the time gap between moving the books and indicating their location is minimized; (4) repair of books which are falling apart and would not last long if stored in their present condition; (5) temperature and humidity control to prevent decay of book materials.

The Future

The Annex Library is designed to be a continuously functioning operation. Access to books stored therein will always be needed. Provision has been made in the original construction to expand the capacity of the building in the future.

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LOUIS KAPLAN

Information Retrieval From the Management Point of View

Several conclusions may now be drawn by management, based on results derived from several "laboratory" experiments in information retrieval. A major finding is that a controlled indexing language (controlled by an authority list of headings) will not provide more effective retrieval than will the uncontrolled type. Automatic indexing, using semantic and syntactic devices, does not improve upon the performance of a manual system. Increasing the number of subject entries per document (with or without computer) will increase the number of retrievals relevant to a question, but will at the same time disproportionately increase the number of nonrelevant references.

Introduction

A number of investigations conducted recently by documentalists have grave implications for those library administrators contemplating the development of a large-scale information system. In this paper some well-known experiments are discussed, and the results evaluated from a management point of view.

During the past few years a number of significant tests of information retrieval systems have been conducted, of which three are perhaps most important to librarians: the work by Cleverdon and his associates at the College of Aeronautics in Cranfield, England; by Saracevic, Rees, and others at the Center for Documentation and Communication Research at Case Western Reserve University; and by Salton and his co-workers in the Department of Computer Sciences at Cornell. These information scientists have indisputably advanced our understanding of information retrieval; on the other hand, their efforts to optimize retrieval have not met with undivided success. Furthermore, from the library management point of view, the depth of indexing employed, the construction of thesauri, and the sophisticated devices introduced seem terribly expensive. Nevertheless, it would be a mistake for librarians to ignore the implications of the work done by these information scientists.

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Brief Description of the Tests Under Discussion

1. *The Cranfield tests.* The Cranfield tests emphasized the significance of language devices which influence recall and precision, such as roles, links, interfixing, partitioning; also studied was the influence of the number of coordinate terms in a search question and the depth of indexing.[1]

Three indexing languages were tested: single-terms, concepts, and a controlled language, all in the subject field of aerodynamics. With each language several recall devices were tested, and

for each of the languages several precision devices were used, including coordination.

2. *The Case Western Reserve tests.* Several indexing languages were tested by Saracevic and his team.[2] Those that need be referred to in this context are: (a) keywords assigned by indexers (that is, in the language of the text) and (b) a language based on the so-called "telegraphic abstracts" (a language employing a number of formal recall and precision devices).

The tests conducted at Case Western Reserve University emphasized the influence of the manipulation of search questions. Depth of indexing was tested by treating full texts, abstracts, and titles as independent variables. A third major variable was the indexing languages.

3. *SMART.* The SMART system (originally established at Harvard, now at Cornell) is described in a recent text by Gerard Salton and in a number of reports entitled *Information Retrieval System,* coming most recently from the Department of Computer Sciences at Cornell.[3] Unlike MEDLARS, where machine manipulation follows manual indexing, SMART indexing depends as well upon machine manipulation of the documents prior to the actual retrieval process. Each search question and each document is manipulated from the viewpoint of word and phrase frequency and from the viewpoint of establishing, by frequency studies, clusters of related documents.

In addition, dictionaries are provided to reduce the variety of words by compounding stems and suffixes; for example, one dictionary makes it possible to recognize the singular and the plural of a word as a single term, and words such as economize, economical, economies are also gathered up as a single term. Semantic relationships are established by means of a dictionary of synonyms, and the hierarchical relationships are established in a classified system. The syntactic relationship between phrases is controlled by phrase dictionaries, for example, library schools and schools of librarianship. The emphasis in SMART, then, is on the influence of these dictionaries on the document search and in the manipulation of the search questions. These dictionaries are studied independently and also with respect to their cumulative effect. Thus the SMART system identifies the single best dictionary, as well as those which in combination prove most efficient with respect to recall and precision.

Results of Tests

The inverse relationships of recall and precision. There is general agreement that there is usually an inverse relationship between recall and precision, that is, while recall can be raised to 100 percent, the cost in the number of nonrelevant documents retrieved is great. The nearer one approaches 100 percent recall, the greater proportionately is the drop in precision.

Automatic indexing. Using SMART methods Salton came to the conclusion that, "Fully automatic text analysis and search systems do not appear to produce a retrieval performance which is inferior to that obtained by conventional systems using manual document indexing and manual search formulations."

Precision and recall devices. Precision devices, except for coordination, proved of little value. Of the various recall devices, the use of synonyms proved significant, while the hierarchical (classified) proved less effective than had been supposed. At Case Western the use of role indicators proved to be significant only when the full text was available to the indexers; with abstracts, role indicators and other retrieval devices were not superior. At Cranfield, the controlled language performance

was not improved by manipulating it hierarchically.

At Cranfield a surprising outcome was the realization that the uncontrolled single term natural language of the text was little improved by most recall or precision devices. At Cornell, it was found that the cumulative effect of all the dictionaries was more effective than any lesser combination.

In summary, in any system a significant recall device is the dictionary of synonyms, but the hierarchical element is not of major significance. Coordination is a powerful retrieval procedure.

Controlled languages. At Cranfield, a rank order of thirty-three indexing languages and devices was published, indicating their power of recall. The top seven languages were all uncontrolled. The best controlled language ranked tenth; its recall ratio was 61 percent compared to 65 percent for the best of the uncontrolled languages. The statistical difference between them is regarded as significant.

Some Observations from the Managerial Point of View

Cost factors. Information scientists have not seriously attacked the question of the cost of the various indexing languages.[4] It would appear, given the emphasis placed on the indexing languages at Cranfield and the search strategy at Western Reserve, that a number of those engaged in the testing were probably well acquainted with the subject matter of the tests. Despite this, Saracevic reported that the single greatest and most important variable was the quality of the indexing. A study of MEDLAR failures shows that with respect to recall, 72 percent of the failures can be attributed to faulty indexing or to faulty search strategy, while with respect to precision the number attributable to these two factors was 45 percent From these bits of evidence the relative insignificance of the indexing system and language, compared to the indexing itself, and the imaginativeness of the search strategy, rises to haunt us. Furthermore, realizing that automatic indexing is not now superior to manual indexing, and guessing at the cost of this kind of indexing, the prospects are anything but bright.

Depth of indexing. Also significant is the considerable depth of indexing employed in these tests, depth considerably greater than is provided by conventional subject catalogers. At Western Reserve, the number of indexing terms extracted from the full text ranged from thirty-six to forty, while twenty-three to thirty were taken from the abstracts.

The significance of the depth of indexing can be seen in the statistics supplied by Cranfield in tests run on the single-term, natural language indexing language: with fourteen index terms, the recall ratio was 62.8; twenty-two terms produced a ratio of 63.5; and thirty-three terms produced a ratio of 65. However, there is a law of diminishing returns with respect to the depth of indexing. When an average of sixty terms were taken from abstracts, the recall ratio dropped to 60.9.

Automatic indexing. Turning to automatic indexing, of considerable significance from the managerial point of view is the fact that the intellectual effort required is considerable and of great significance with respect to the results. In the absence of a good dictionary of synonyms, the results can be disappointing, while the time required to compose a dictionary is an imposing consideration, as Salton has noted.

On the average, using all the devices available, SMART performs as follows:

Recall Ratio	*Precision Ratio*
10	85-95
50	60-80
100	30-45

As Salton himself has admitted, these are not satisfactory levels of performance.

Coordinate indexing. The first Cranfield study (1962) tested four indexing systems, of which one was a coordinate system, best known as Uniterms. As summarized by Cleverdon, "It achieved the best overall figures in the test, it presented no difficulties for the technical searchers . . . and was notably successful with short indexing times. It appears to have as good a relevance figure as any other system."

Nevertheless, the Cranfield group refuses to concede any natural advantage to Uniterms (a "post-coordinate" system) over the others tested (the "precoordinate" types). The capability of retrieving any combination of terms is a feature of a post-coordinate system, yet "the results of the investigation show that this advantage, though it existed, was not large." Also: "the difference between the two types of system is therefore shown to be not a fundamental difference but merely one of cost or convenience, and it has not been proven as yet on which side the advantage lies."[5]

It should be made clear in this connection that the Uniterm index system tested at Cranfield was devoid of various precision devices which are a feature of other coordinate indexing systems (such as the metallurgical index at Case Western Reserve). In the presence of such precision devices, the recall ratio found at Cranfield presumably would have been lowered.

The argument has been made that a Uniterm system will break down if used with a large collection of documents.[6] Cleverdon disputes this, though neither disputant can argue from experience. Still another theoretical argument against the Uniterm system is that it might prove less effective with social science and humanistic materials than with materials in the natural sciences.

Computer manipulation of a manual-based system. Such a system is MEDLARS; it is not an automatic system in the sense of the SMART system. In the MEDLARS system, other than the machine search itself, the indexing operations are performed manually. The MEDLARS system, on the average, provides the user with about 60 percent of the relevant documents in the collection, but of the total documents retrieved, about 50 percent will not be relevant.

It is widely believed that computer manipulation when applied to a controlled indexing language will greatly improve its efficiency. This is not true; even if more subject terms per document are posted, the overall efficiency of a controlled indexing language will not be significantly improved by computer manipulation, assuming that improvement of the recall factor alone is not enough.

This raises a perplexing question. Are all our users equally allergic to an increase in the number of nonrelevant documents, given an increase in the number of relevant ones? For example, in this regard are historians to be equated with chemists? With economists?

Another perplexing question is this: librarians suspect that scholars do not use the subject catalog extensively, and most often use it with respect to subjects outside their own speciality. Is this mainly because the subject catalog is inadequate, or because their more urgent retrieval needs lie in nonmonographic documents not now indexed in our subject catalogs?

Search strategy. Also of importance is the amount of manipulation of questions (commonly termed search strategy) that took place in these experiments. In university libraries few questions are manipulated to the extent that took place in the tests under discussion. In the Cranfield tests and at Case Western the manipulation of the questions

was extensive. At Case Western each question was searched in four different ways, namely: (1) the searchable terms found in the question itself; (2) to (1) is added terms taken from a thesaurus; (3) to (1) is added terms taken from encyclopedias and sources other than the thesaurus; (4) a combination of (2) and (3).

The considerable influence of these four manipulations can be seen in the number of relevant and nonrelevant documents retrieved:

	(1)	*(2)*	*(3)*	*(4)*
Relevant	106	130	180	192
Nonrelevant	124	197	509	598
Recall Ratio	.43	.52	.72	.77
Precision Ratio	.54	.48	.34	.33

At Cornell, various semantic and syntactic procedures are applied both to the questions and to the documents; to put it otherwise, the heart of the SMART system is the correlation coefficients by which terms in the question are matched with terms from the documents.

Except in libraries serving a small group of users, in a manual setting this kind of question manipulation will not be possible unless highly skilled librarians in considerable numbers are employed. In the automatic system the manipulation of the questions is mandatory.

Whether the costs of sophisticated information systems can be justified in either the manual or the automatic mode remains to be seen. At the moment we have no idea what costs would be incurred by systems such as the SMART system in the setting of a large library with a large number of scholars engaged in research. As for making the system available to undergraduates, this involves an entirely different order of cost magnitude.

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VERN M. PINGS

The Library as a Social Agency, Response to Social Change

Libraries, as other social agencies, must study and evaluate their effectiveness and seek to improve their methods for achieving the external objectives for which they were created. Our information-consuming society demands that libraries establish large interdependent systems, yet maintain methods for supplying individual service. Large systems require change in our institutional structure once new objectives are defined. Action decisions for change can be made rational only if they are based on all available information and alternatives for actions evaluated in terms of objectives. Although little research has been done on the factors involved in institutional change, three general approaches are acceptable today: through the introduction of technology, by redesigning formal organizational structures, and through altering shared norms and values.

Society has so many agencies that many forget that these agencies were created to produce an action of benefit to society. Social agencies, which began with a concern for social problems and which may at their inception have demonstrated that they had effect on problems, have often degenerated into systems where a major concern is the preservation, or even expansion, of the system itself. A subtle shift in emphasis occurs in which the objectives of the agency move from dealing with external problems of other people to that of problems involved in maintaining the professional status of the members of the agency. An underlying assumption of this paper is that social agencies, including libraries, supported by public, voluntary, or philanthropic funds, must study and evaluate their effectiveness and seek to improve the methods they employ to achieve the external objectives for which they were created. It is not enough for those who work within these social agencies to believe, however sincerely, that they are performing a social good.

> It is not enough to invoke "experience" or to collect meaningless and misleading information. . . . It is not enough to rely upon the support of colleagues and those in the same professional group and to accept their endorsement of our work as proof of effectiveness. Professional in-group support does not measure effectiveness and does not absolve us from accountability for our decisions.[1]

I do not wish to convey that social agencies, with their bureaucracies, are evil and that the number necessarily should be reduced. Society with the introduction of massive amounts of technology makes us highly interdependent. Social agencies are fundamentally instruments of human action. Their organization exists for the achievement of specific pur-

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poses and socially useful functions, and they depend upon a consistent relationship between means and ends. As Merton noted, "more and more people discover that to work they must be employed. For to work, one must have tools and equipment. And tools and equipment are increasingly available only in bureaucracies."[2] For a bureaucracy to function successfully, it must have a high degree of reliability of behavior, a commitment to conformity with prescribed patterns of action.[3] A social agency, be it a commercial, governmental, religious, or voluntary organization selling a product or providing service, must have socially accepted objectives and an efficient administrative structure if it is to survive. The ultimate check on a social agency in an open democratic society is the support it receives. A commercial agency goes bankrupt if it cannot sell its product at a profit. The check on other agencies is not often measured in terms of monetary profit, but nevertheless one exists. If the objectives are unacceptable or the operation inefficient, taxpayers or philanthropists will sooner or later threaten to stop support. The social agency under these circumstances must make a reassessment of itself, or die. The purpose of this paper is to examine the methods available to libraries, or other agencies, in making reassessments and how they can bring about changes in structure to allow them to become more viable social agencies.

The pressures being placed on libraries are well known. The Public Library Inquiry which published its reports twenty years ago stated boldly and clearly that purposes for which the nation's public library system had been designed have largely been filled and that if the public library as an institution is to survive, it must relate itself to new functions. The specific recommendation is that the public library become part of a national library network that would encompass other libraries now serving educational and research institutions.[4] With the aid of the Library Services Act of 1956 and through the leadership of librarians and state and county libraries, there has been some accomplishment in the establishment of networks. Nevertheless, an accusing finger still can be pointed at public libraries.

> The public library has more users and more money today than ever before, but it lacks a purpose. It is trying to do some things that it probably cannot do, and it is doing others that it probably ought not do. At the same time, it is neglecting what may be its real opportunities. What the library needs is, first, a purpose that is both in accord with the realities of present-day city life . . . , and second, a program that is imaginatively designed to carry its purpose into effect.[5]

Academic and other resource libraries are similarly afflicted with problems of an inability to define purposes. The academic library administrators can perhaps be exonerated to some extent for this dilemma because as students are pointing out throughout the nation, universities as institutions have not kept up with realities of our society. The ivory tower academic library of only a generation ago had, compared to today, simple objectives. These libraries took on society's responsibility for collecting and storing man's cultural heritage as recorded in books and journals. Certainly it was never a deliberate intent of academic libraries a generation ago to be isolated centers for an intellectual elite, but insofar as library service was concerned, they were. The number of libraries that have to cope with an inventory of over a half-million physical volumes, which contain millions of discrete bibliographic items, are now in the hundreds. The housekeeping problems have become horrendous. This factor alone makes the academic library an almost

unmanageable monstrosity.[6] Further, the number of students physically located on our campuses are beyond the facilities of our libraries to contain. The process of translating theoretical knowledge into applied knowledge has resulted in a constant increase in the number of people who must have access to the scholarly record. We are an information-consuming nation. One need only look at the growth of institutional members of such agencies as the Special Libraries Association and the Medical Library Association to gain insight into some of the problems of academic libraries. Although the hundreds of special library units created within the past twenty-five years have the same purposes functionally as the academic libraries—that is, they must supply library service to a group of people engaged in applied research or problem solving, and to a group of people who must constantly be involved with educating and reeducating themselves—these new special libraries have administratively different objectives. The materials collected are only sufficient to keep their primary clientele currently aware of new knowledge. They are organized to serve as an access point to the total scholarly record. They take no social responsibility for preserving the scholarly record. The assumption is that this is being taken care of by the academic institutions. The academic and other resource libraries are, after all, public institutions, and they have promoted for decades the availability of their collections. Each time a hospital, industry, or other social agency establishes a library unit that serves as an access point, the clientele of the resource library does not increase by one, but often by hundreds. What is even more important is that the service asked for from these access points is the most expensive kind to supply. It asks the resource library to retrieve what librarians often euphemistically refer to as the exotic material—which, because of lack of space, has often been stored inefficiently. Further, the difficult bibliographic and other reference problems are sent to the resource library to solve, because again the assumption is that it has the tools and facilities to solve them. Resource libraries obviously are not infinitely expansible; they simply cannot continue to accept more and more requests without some reorganization of purpose and administration.

The Need and Conditions for Change

Since Wiesner and York had the courage to admit that there are some social problems which have no technical solution, others have been able to come to similar conclusions.[7] I shall join this group and assert that the major library problems of today admit of no technical solutions. By a technical solution is meant one that requires a change only in techniques or application of knowledge of natural sciences. Little or no change in human values or ideas of morality is demanded. Computers, for example, are not and will not be a solution to library problems until society changes its values. Libraries are going to have to deal with books and journals and the housekeeping details that accompany their storage and retrieval as long as society maintains its present publication prestige system and educational methods. Further, until the ethical conditions of intellectual ownership legalized through copyright laws are altered, the potentiality of retrieving from computer memories cannot be realized. Although the difficulties of libraries as social organizations are not amenable to technological solution, it is nevertheless technology which is forcing libraries to change. Prior to World War II when social agencies exploited the development of faster or more efficient means of transportation, communication, or data processing, they merely became larger.

The same things were done only in a bigger way. Suddenly these accumulations of technology made us begin to feel as though we were running out of space. Each "improvement" made us more interdependent and made us feel as though we were crowding people closer together. That our institutions must change and that our value system must also change in order to arrive at new objectives brings up a major question: is it possible for our culture and institutions to adapt to so much change?[8]

Whenever change begins, it must start with conditions as they exist. Any planning and any action must relate to the social agencies now operating, even if one tries to circumvent them by establishing new agencies. The Eisenhower Commission on National Goals defined sixteen goals for the nation to attain.[9] Similarly, the National Advisory Commission on Libraries has recently offered specific goals to work toward. The common recommendation of almost any study group that investigates any social problem or the fate of a social agency, whether it is a national commission or an academic committee, is that more federal support should be provided and that more manpower should be deployed. Some study has been given to the achieving of the sixteen national goals, and it was concluded that the cost by 1975 would be $150 billion more per year than the expected gross national product. Further, it was calculated that a labor force of 101 million would be needed, which is 12.5 million more than can be expected in 1975.[10]

Before discussing the general conditions through which priorities and objectives for social action can be established, a precept of society needs to be stressed. Change in social agencies is aimed at modifying the behavior of people. This seemingly obvious point needs emphasizing because so many people view social change as purely institutional change, and evaluate economic technological and educational inputs strictly in those terms.[11]

If the arguments presented so far are acceptable, (1) that for our society to "progress" we must have larger organizations because only the large organization can secure, maintain, and use the technological improvements, and (2) that the federal government is the major source of funds to create these new bureaucracies, then we face the problem of development of vast bureaucracies which would subjugate individual choice and freedom. This goes counter to the nation's individualistic tradition. The Commission on National Goals had as its first goal that:

> The status of the individual must remain our primary concern. All our institutions . . . must further enhance the dignity of the citizen, promote the maximum development of his capabilities . . . and widen the range and effectiveness of appointments for individual choice.[12]

Libraries share with many other agencies the purpose of providing service to individuals. The librarian in a small library unit gets to know his clientele and caters to their needs and proclivities. If we are faced with creating large library systems, this individual attention will have to be modified. Large systems cannot cope with myriad exceptions to rules. The alternative appears that libraries, as social agencies, are going to have to begin organizing themselves so that they take a more active role in changing the behavior of their clientele. The long held ideal that the library exists to give people what they want when they want it will have to be abandoned. Library systems are going to have to demand that their clientele take responsibility in the use of library services. Manufacturers issue guaranties and warranties with their products, but there are conditions. If the owner of an automobile, for example, does not return

to an authorized dealer within a specified period to have his automobile checked, the warranty is invalid. In other words, if the owner does not act responsibly, the manufacturer is absolved from further obligation to provide dependable transportation. To some this may appear as a kind of coercion in which arbitrary decisions are made by distant and irresponsible bureaucrats over which the individual has no control. This coercion can be viewed in another way: the automobile owner agrees when he purchases his automobile to act in a certain way; if he does not wish to follow the rules of the manufacturer, then he is subject to other sanctions. In some areas of the nation, automobiles must have an annual safety check. If the inspection shows the automobile to be unsafe, and the owner has allowed his warranty to lapse, he has no choice except to pay for the repairs himself or be denied a license to operate the automobile. The point is that society must protect itself from the irresponsible individual. Mutually agreed upon responsibilities between social agencies and individuals has become a *sine qua non* of cultural organizations.[13]

To summarize: libraries, as other social agencies, have not kept pace with social needs. A change in objectives is demanded which in turn changes functions and results in the requirement for reorganization. Because of the growth of technology, existing library units can no longer continue to grow only in size, but must incorporate into their structure new institutional as well as individual responsibilities. Competition for funds and manpower to meet national aspirations are going to require compromises from all social agencies, and libraries are not immune. Some kind of social action different from maintaining the status quo is mandatory. Is it possible to proceed rationally in altering our social agencies? If we want social action—which is better than maintaining the status quo—it will be necessary for us to make comparisons according to some scale, and preferably a scale which enables us to say *how much* better one action is than another.

Rationality in Institutional Change

One would think that since rapid social change is a condition of life, a great deal of study by social scientists would have been done on the sources, directions and meaning, as well as on the methods of effecting change. Unfortunately, this is not the case.[14] Also, since it is through institutions that society effects most of the overt changes by altering the authority structure, one would assume that the social scientists would have collected a great deal of data on the means and effects of manipulating bureaucratic organizations; again, however, little empirical data are available on which to make generalizations.[15]

> It is difficult if not impossible in any given situation to demonstrate in rational terms how one particular organization structure yields a higher payoff than another. What can be demonstrated . . . of an organization structure is: (1) that a proposed plan is different from others in the distribution of authority; (2) that it will benefit some individuals and groups in the balance of power; (3) that plans similar to the one proposed are used elsewhere and seem to work satisfactorily. Beyond these demonstrable features a formal structure in the final analysis represents one design of organization, among a number of options, in which the authority figure invests his confidence as his solution. . . .[16]

Viewed in this way, formal organizations appear to be nonrational and based on cliques, informal leaders, unwritten codes of behavior, and motivations and styles of leaders. However, to admit that social agencies arise through irrational decisions over which there is no control or hope for direction would

indicate a poverty of intellect.

Communication, used in the broadest context, is the instrument through which society adjusts itself to the alterations introduced by technology, political decisions, and other factors which cause social changes. If certainty is sought, scientific method can offer no panacea. Scientists long ago recognized that even in the natural sciences nothing can be stated as completely scientifically true. Science can only produce more technology; but, as noted earlier, technology is not a solution to social conditions. If we are going to solve our nation's library problems, we deal with them on a piecemeal basis, but this does not mean we act randomly or that we ignore the consequences of our actions. We can bring rationality to our decisions for action if we relate them to (1) other possible decisions, (2) the information available, and (3) objectives consistent with our philosophy of society. Let us examine each of these constraints within which we must maneuver.

1. *Possible decisions.* In any situation involving administrative operations, several courses of action are always available. One of the surprising things about the psychology of librarians is their inability to recognize that the practicing librarian, if he is rated as good by his peers, is one who is constantly making decisions. What is more discouraging is to observe the lengths to which librarians will go to avoid the responsibility of making a decision. Some have contended that the major reason cataloging is thought of as the least desirable of professional specialties is that cataloging teachers do not instill in their students an understanding of the need for decision making. There are no "pat" answers to specific problems. There are many ways of doing things. What we do is not as predetermined as we sometimes believe. We have greater freedom to act, to change the structure of our response, and find opportunities in our environment than bureaucratic rules would lead us to believe. If we understand thoroughly how we are determined by examining possible decision alternatives, then we can gain confidence to act so as to transcend the determinism we feel is imposed upon us.[17]

2. *Availability of information.* Given certain conditions, alternative actions are possible, but if changes in organization structure or objectives are to be effected, information about more than the immediate set of conditions is useful. The more relevant information available, the better the decisions that can be made; or to say it another way, the more likely it is that the desired objectives could be achieved and the greater the chance that decisions when effected can cause improvement. There are two extremes with respect to the availability of information that seem to dominate; we either make decisions and act without enough information, or we delay so long awaiting relevant information that the objectives change to the point where the original problem has disappeared—if you wait long enough, the problem solves itself. This kind of nondecision-making is irrational behavior.

Making decisions without making an effort to gain relevant information might be generalized into two dimensions—the wish to remain innocent and the desire to remain ignorant. The wish to remain innocent has some rather extensive research to support the contention that it is not an uncommon phenomenon. If a person is told by some authority, or if he has persuaded himself, that he is in no way responsible for the consequences of his actions, information which is relevant to the problems he is dealing with will be *perceived as* irrelevant.[18] Dozens of examples could be cited in which librarians have appeared to wish to re-

main innocent; perhaps one example will suffice here. At least six times in the past five years an attempt has been made to "experiment" with electronic transmission of library materials. The results of these experiments have been published in at least three cases in exacting detail, and all the experiments come to the same conclusion: with present technology the cost of long-distance transmission of textual material for library purposes is beyond the capability of society to support. What is even more significant is that even if cost is discounted, the time involved in transmitting large quantities is so great that it is faster to use the mail. In spite of this incontrovertible evidence, librarians are still seriously searching for funds from the government and foundations to install such transmission systems with the same set of conditions reported in the studies. Apparently they think that their institutions are unique, or the experience of other institutions is irrelevant, or they do not wish to understand the work of their peers.

The wish to remain ignorant is more subtle and is less supported by social research, but it is nevertheless experienced by most who have worked in bureaucratic environments. An administrator will reject information which relates to the existence of problems or will reject a proposal for investigation on the logically sound position that any information revealed could only be an embarrassment. If no information is available, any decision, either right or wrong, cannot be challenged as irrational. If information does become available, it becomes possible to put forward arguments in favor of some decisions rather than others. Perhaps no one has defined it as a bureaucratic law, but the number of rational decisions will tend to diminish as information increases. "It is possible that if information could ever be complete with respect to any subject, there would be only one optimum and rational decision to achieve any one given objective."[19]

3. *Definition of objectives.* Social agencies are instruments for human action to make groups or individuals more effective members of society. One might consider it a peculiarity of civilization that military organizations have been able to marshal the means to effect specific objectives with dispatch, while organizations which purport to build society have less success in stating accomplishable objectives. This is understandable if one looks at the organizational structure of the military. Authority is vested in a hierarchical structure and orders are followed implicitly. Although the military may point to accomplishments in reconstructing societies they first destroyed, the ideals which guided this reconstruction were not derived from a military organization, but from the ethic of the society which supported it. Modern civilization recognizes but two generalized types of power structures—the centralized hierarchical and the pluralistic decentralized. In a hierarchical structure a few people can establish social objectives and force society to expend their energies to accomplish them. Social agencies are created to support those objectives. In the pluralistic society objectives can never be simply defined. Action is only possible through compromise and consensus. Consensus is, however, a temporary condition in an open society. One cannot have the stability of a hierarchical structure and also the freedom of choice permitted in a society defining its goals through consensus. The social administrator in a pluralistic society is not in charge of establishing the social ethic, he is its servant. Further, any social agency charged with insuring social goals through its action can only validate itself if it questions the general social

ethic. Every social agency should be evaluating itself constantly, and the general method for doing this might be summarized in three questions:

1. What would happen to society if the agency suddenly died, and how many people would it affect?
2. What are the possible consequences of altering any of its stated functions?
3. What other social agencies does it assist or support, or conversely, with what other agencies does it conflict?

The information available will determine the precision of answers which can be given these questions. Library investigators, planners, and administrators must realize that libraries have to perform a social function that must be measured against total social needs and purposes. As a social agency, a library must operate efficiently, yet it is not possible to improve social efficiency without some basis in measurement. As inadequate as it may appear to those who quest for certainty, consensus not of peers but of society is the most important instrument with which to construct worthwhile objectives.

Methods for Effecting Change

If objectives are defined, if as much relevant information is acquired as is feasible within imposed time and cost constraints, and if the alternative decisions for action are evaluated, then the next step is to create an administrative organization to do the work. As already pointed out, very little investigative work has been done to determine how to create, alter, or improve bureaucratic structures. Conceptually, we are still using the descriptions of bureaucratic authority of a generation ago to explain our present social agency structure. Weber described three types of authority:

1. *Legalistic.* Such authority rests on the belief in legality of patterns of rules and the right of those elevated to authority under those rules to issue commands.

2. *Traditional.* Here authority rests on the established belief in the sanctity of traditions and the legitimacy of the status of those exercising authority under them, *e.g.*, the family, clan, or an aristocracy.

3. *Charismatic.* Because of the specific sanctity, heroism, or character of an individual, and because of the normative patterns of orders revealed or ordained by him, this person and possibly his appointed successors are accorded authority over others; certainly our religious organizations have arisen through this means, but in our secular society we produce schools and cults from whom we accept commands as authoritative.[20]

Weber based his synthesis on the study of late nineteenth and early twentieth century social organizations. With this view of social agency structure, almost the only way an organization can be changed is to bring in new people and let the old ones go. Weber did recognize another way, the introduction of collegiality, a body of legislators, be they executive committees, boards of trustees, or senators, who by employing various pressures limit and control hierarchical authority.[21] This simplistic concept has altered enormously because of the rise of a new kind of authority figure—the expert. Let us examine what methods exist for changing the formal organizational structure of agencies other than by hiring and firing people.[22] There are three basic approaches:

1. *Change through the introduction of technology.* An administrator may think that by bringing in a new machine he can make his organization operate more

efficiently. He ordinarily does not expect that much change will take place; this is a delusion. A new technical device requires skills to operate—skills that the administrator does not possess. In the nineteenth century the boss of an agency could pride himself on his ability to do any job that his people did. Administrators must now supervise people who do things they cannot have time to learn and may not even have the talent to understand. The administrator's life is further complicated by having to hire still another group of people—the mechanics who service the machine. Again, another specialist is introduced over whom he cannot enforce any of the traditional means of authoritative control. The introduction of a technological device into an organization results in the employment of two types of people who do not fit into the old organization, the person who operates the machine but does not necessarily know how to repair it, and the person who repairs it, but does not necessarily know how to run it.

The administrator compensates for his loss of authority by creating still another expert. In industry in the 1920s he was called the efficiency expert, whose name began to be changed to industrial engineer in the 1930s. By virtue of his expertise he began taking over much of the planning function of production supervisors. The modern-day counterpart who has become an even higher-level expert is the operations research scientist who now even takes over the planning for the administrator.

Whereas industry has tried to cope with technological change for over forty years through the creation of new experts, libraries have only recently begun to deal with organization structural change through the introduction of technology. Until a few years ago the chief librarian of even the largest library, if he could type, was perhaps technically equipped to do almost any task his staff had to do. Electronic data processing equipment has now changed not only the role of the chief librarian, but most other library specialities. This situation may soon be equalized because one library school after another is trying to introduce into its curriculum a sequence of courses that will produce the equivalent of an industrial engineer. The title given this person, which in most cases he cannot live up to, is systems analyst. Operations research techniques are also being introduced into the curriculum, and it will not be long before we have library operations research specialists.[23] If we want to change library organization structure, we have the technology to do it. The question is, however, do we have the wisdom to introduce technology to meet new objectives, or will we use it only to build bureaucratic empires?

2. *Changes in shared norms and values.* Authority in an organization is ultimately based on the shared values and beliefs about what is correct, or at least acceptable, behavior by the people working in the organization. If we cannot find an acceptable role, or niche, we soon find ourselves looking for another job, either voluntarily or involuntarily. Changing values and norms within an organization is rarely rapid. There are two general ways in which this is done.

The first is through education. Certainly in librarianship there are now so many institutes, seminars, workshops, and continuing education courses, besides professional meetings, that a librarian could spend his whole time traveling and theoretically learning. Although this is now an accepted technique to promote change, very little work has been done to evaluate how effective this approach is. It does seem to be common sense that unless this education begins at the top, few values and norms will change. If an administrator generously

releases time for his middle and lower levels of staff to undertake additional training without himself doing so, frustration will occur. Unless the top can be influenced by new values, changes made at the middle or lower levels could create even greater problems and at best remain encapsulated in that particular unit.[24]

The other way to bring about an alteration in values and norms is to bring the expert to the social agency rather than send the staff out to be educated. We have now in our society a whole group of behavioral scientists acting as consultants who often refer to themselves as "change agents." This has indeed become a lucrative sideline for many academicians, so much so that library consultant firms have been operating quite profitably for many years.

3. *Changes through redesigning the formal organization.* If little research has gone into the other two methods of changing organizations, the redesign of the formal structure is one that is frequently tried with the least amount of information available on which to make rational decisions. If attempted, it is done almost entirely through intuition and carried through because of a crisis situation. The other common reason to cause a redesigning of the formal organization is outside influence. It may be from a pressure group. It may be from incentive legislation making funds available either through grants or subsidies to which are added restrictions literally requiring new formal structures. If it occurs entirely within an organization, new departments and divisions are created through the amalgamation of old ones; new titles are given to the same jobs but implying new status. One thing can be said about this approach: if there is an alteration in the balance of power, no constructive change will result unless those whose power is reduced are given alternative compensation.

Summary

Our libraries must change to survive as useful institutions. New objectives must be found that are consistent with our technological society. We must create measuring instruments which can demonstrate the value of libraries as social agencies; without such instruments they cannot successfully compete for manpower and financial resources. Although there is little sound research, derived knowledge, or even good empirical information on which to base rational decisions for organizational change, there is sufficient evidence that libraries are going to have to incorporate new kinds of experts who will take over planning that hitherto has been in the hands of library administrators. Techniques and methodology, even though poorly developed, are available to society to improve libraries. The problem in its specific form is the difference between present conditions and desired objectives. To get a problem solved requires that somebody be committed to choose and decide among alternative solutions and moves. The uncommitted man can delay and get nothing done. The committed man creates problems by stating objectives and then trying to bring the actual conditions closer to these objectives.

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E. J. JOSEY

Community Use of Junior College Libraries—A Symposium*

In the fall of 1965, the Committee on Community Use of Academic Libraries of the ACRL surveyed the extent to which library service is given to community users. More than 1,000 college and university libraries were queried. After the results had been tabulated, it was discovered that very few junior colleges or two-year colleges were included in the survey.[1] In order to obtain a comprehensive picture of library service to community users by all types of academic libraries, the committee decided that it was necessary to survey the two-year college libraries.[2]

In order to determine the extent of the community use of junior college libraries, it was the committee's opinion that the questionnaire used in the first survey should be revised. The revised questionnaire, while designed like its predecessor to probe various facets of community use of junior college libraries, also included questions which would give in-depth information on the junior colleges. Possible conclusions or assumptions could not be reached without relevant institutional data. Thus the participants in this survey were asked questions relative to the size of the library collections, the number of persons on the library staff, student enrollment, size of the faculty, and population data of the geographical area in which the particular junior college was located.

In March 1968 a questionnaire was sent to 689 junior college libraries in the nation; 308 or 45 percent of the libraries responded.

The findings are presented in symposium format utilizing the expertise and assistance of all members of the committee. Barbara LaMont, librarian, Vassar College, Poughkeepsie, New York, assumed the responsibility for machine tabulating the responses to the questionnaires. John E. Scott, librarian, West Virginia State College, discusses questions 3 and 4. Questions 5 through 7 are analyzed by John B. Smith, assistant director of libraries, Texas A. & M. University. Richard C. Quick, director of libraries, State University of New York College at Geneseo, reviews questions 8 through 11 as well as institutional data. Questions 12 and 13 are discussed by Edward C. Heintz, librarian, Kenyon College. George C. Elser, librarian, Chaffey College, analyzes questions 14, 15, and 17. A consideration of the significance of the findings to two-year colleges and an analysis of questions 1, 2, and 16 are the province of this writer who serves as chairman of the committee.

Use of Library Materials by Outsiders

The first question attempted to discover if junior college libraries permit in-building use of library materials by persons other than students, faculty, staff, and their immediate families. Most of the respondents replied affirmatively, 282 or 91 percent marked yes, nineteen or 6 percent answered no. Seven or 2 percent failed to answer.

The results of a survey of junior college libraries conducted in March 1968.

If the respondent answered yes to the first question, in the second question part *a*, he was asked if he permitted quick reference only, and in part *b*, if he permitted unrestricted use of study space. The largest number of respondents, 139 or 45 percent, gave no answer; the next largest group, 122 or 39 percent, marked no, and forty-seven or 15 percent indicated that they offered quick reference only. One can deduce from these responses that the overwhelming number rejected the provision of reference service only, if we may be presumptuous enough to combine the number of those who failed to answer with those who rejected the offering of only quick reference service.

Turning to the unrestricted use of study space, most of those reporting, 259 or 84 percent, allowed unrestricted use of study space in their libraries. Only nineteen or 6 percent did not permit unrestricted use of study space. Thirty or 10 percent elected not to answer. An analysis of the responses to parts *a* and *b* of question 2 leads us to conclude that by and large the community user is given more than just quick reference service in these junior college libraries. The truth of the matter is that the "outsider" is welcomed and is given, for the most part, use of study space in the libraries of these institutions.

Circulation of Library Materials to Outside Borrowers

JOHN E. SCOTT

While 91 percent of the responding junior college libraries permit use of library materials inside the building by persons other than students, faculty, staff, and their immediate families, the story is somewhat different when the libraries are asked, "Do you *circulate* library materials to persons other than students, faculty, staff, and their immediate families?" Two hundred and seventeen respondents said yes, but this amounts to only 70 percent of the libraries which allow library materials to be taken out of the building by outside borrowers as compared with 91 percent which permit inside use of materials. Eighty-eight respondents or 28 percent replied no, they do not circulate library materials to others; three respondents did not answer.

Question 4 was directed to the institutions that indicated they did not circulate library materials to persons other than students, faculty, staff, and their immediate families. It asked, "If the answer to question number 3 is negative, what is the reason for this decision?" Respondents were given a choice of six reasons. Results are given in parentheses.

a. Insufficient library materials for other than college personnel? (75 yes, 6 no)
b. Inadequate staff to administer extra service? (55 yes, 16 no)
c. Basic belief that materials should be used only by college personnel, even though the college program would not suffer through circulation to others? (14 yes, 46 no)
d. Belief that service to the general public would be a disservice to the community in view of the fact that public and/or school library development may be curtailed? (21 yes, 36 no)
e. Difficulties relating to control: getting books back, collecting fines. (72 yes)
f. Other? (Only twenty-two libraries listed other reasons, such as "there has been no demand for it," and "community has such an excellent public library that service from college library is unnecessary." One junior college in Florida noted, "Private institution, community support is not requested or expected; therefore,

community use cannot be encouraged." The longest and probably the harshest comment on this question came from a junior college librarian in Texas who wrote: "If we librarians continue to blur our true functions—each type of library has its own 'public' that supports it and for which it shall supply resources—how can we blame the public and our budget authorities for the confusion on which libraries are supposed to do what, with which, for whom? We have sabotaged ourselves by all of this talk of 'free library service.'")

Policy Statement and Extent of Service to the Community

JOHN B. SMITH

The junior college, more than any other type of institution of higher education, stands in close relationship to its surrounding community. It seems reasonable, therefore, that the junior college library should have a particular interest in community service and that library resources should be made freely available to the community. This does, in fact, seem to be generally the case as analysis of questions 5 through 7 shows.

Question number 5 was designed to find out how many libraries actually have a firm written policy statement regarding community use. It reads as follows: "Do you have a written policy concerning library use by persons not connected with the college?" Tabulations show 29 percent answered yes, 69 percent answered no, and 2 percent did not answer. At first glance, one might interpret this response as lack of interest. But after studying some of the unsolicited comments appended to the question, it seems more likely that libraries have not felt the need to prepare a written statement. Some typical comments are:

"We have never felt the need of a written policy . . . the few requests that are made are usually from alumni or friends."

"An excellent Carnegie Library makes these requests very infrequent."

"We have very few requests."

Several comments also indicated that a written policy was under consideration but had not yet been formulated. From this we might speculate that more institutions feel the need of a written statement and that we will see more of these in the future.

Although we did not specifically ask for copies of the written policy statement, several libraries did send them. A typical one is from Clatsop Community College, Astoria, Oregon, which reads in part:

> In the belief that Clatsop Community College should also contribute to the community's education, borrowing privileges are extended to any resident of Clatsop County. Student needs will come first and the library reserves the right to call in any book for which there is an immediate student need. . . .

Question number 6 sought to learn how many libraries permit relatively free use of their facilities by members of the general public. It reads as follows: "Do you extend the borrowing or in-building use privilege to all members of the general public?"

Of the total, 60 percent answered yes, 38 percent answered no, and 2 percent did not answer. This shows that well over half of all junior college libraries answering the questionnaire permit relatively free access, at least for in-building use, by all members of the general public. There were, however, a few comments indicating that the meaning of the term "general public" was limited in that case to residents of the local community and that persons from other towns or counties were not served.

Question number 7 included six sub-

questions, and was intended to find out to what extent six critical groups are served by those libraries that do not offer service to all members of the general public (those answering question number 6 negatively). Because of the length and complexity of this question, results are shown in the following table:

EXTENT OF SERVICE TO SIX CRITICAL CATEGORIES OF OUTSIDE USERS

Group	Percent of Libraries Serving This Group	Percent of Libraries Not Serving This Group	Of Libraries Serving This Group, Percent That Permit Borrowing	Of Libraries Serving This Group, Percent That Permit In-Building Use
A. High School Students	65	35	41	92
B. Students from Other Colleges	85	15	51	84
C. Teachers and Clergy	93	7	66	56
D. Other Professional People	88	12	56	59
E. Residents of the College District	77	23	43	68
F. Alumni	89	11	51	61

In considering question 7, it is significant to note that very nearly all of the libraries surveyed offer some sort of service, at least to some segment of the community (see also question number 1). Groups such as teachers, clergy, other professional people, and alumni fare extremely well, while others, such as high school students and residents of the college district, are sometimes excluded, but do receive some sort of service in the vast majority of junior college libraries.

Analysis of all three questions can be summarized briefly as follows: relatively few junior college libraries now possess written statements concerning library use by members of the community. This does not seem to be an indication of lack of concern, however, but simply an indication that, in many cases, no problem is caused by community use of these libraries. There is some evidence that more junior college libraries will be formulating written policies on community use in the future.

A large percentage permit relatively free use of their facilities by all members of the public, although the word "public" is sometimes defined as residents of the local community. Of those libraries that do not offer service to the entire public, service is offered to various special groups under varying restrictions. Only in a very few cases was there an indication that community use was actively discouraged.

High school students, students from other colleges, teachers, clergy, professional people, residents of the college district, and alumni are given some sort of service in the majority of libraries that do not offer service to the public at large. Of these groups, high school students and residents of the college district seem to be the most likely to be excluded.

The Outside Borrower—What Limits?

RICHARD C. QUICK

Questions 8 through 11 were designed to determine the conditions under which qualified outsiders are permitted partial or total use of the community college library. The response pattern, especially as shown in answers to the subparts of question 9 concerning specific restrictions, is surprisingly similar to that which developed when the same question was asked of 783 college and university libraries in the committee's survey of 1965.[3]

In question number 8, respondents were asked to indicate whether a fee or

deposit is charged to outsiders for the privilege of borrowing, and if so, to indicate the amount of the deposit or fee. Among 308 respondents, nineteen or 6 percent indicated a fee or deposit. Two of these noted both a fee and a deposit. More than 80 percent of those responding indicated no fee or deposit. In thirty-nine instances, the question did not apply.

In eight instances where a fee is charged, these range from a low of fifty cents in a Texas college to a high of $15.00 in an Alaskan institution. The average fee reported was $3.80. The average fee charged by institutions reporting amounts between the minimum and maximum is $2.50.

In thirteen institutions where a deposit is required, the amounts ranged from a low of $1.00 in one Missouri college to a high of $25.00 at an Alaskan institution. The average deposit required among thirteen libraries is $6.40. The average deposit among eleven libraries reporting amounts between the minimum and maximum is $5.27.

One respondent in Texas reported that a deposit of $5.00 is required for each two books borrowed. Another Texas community college requires a $5.00 deposit, but specified that it does not apply to high school students and public school teachers.

It seems probable that those libraries requiring fees or deposits do so in an attempt to discourage use by outsiders which would add to an already heavy work load being borne by a very few people. The average fee or deposit, however, presents only a token obstacle and should not constitute a real deterrent to the determined outside user. As the committee found in its 1965 survey of college and university libraries, the number of libraries requiring fees or deposits is so few that the practice cannot be viewed as evidence of widespread denial of access.

Question 9 asked, "What modification, if any, is placed upon borrowing privileges extended to qualified outsiders?" This question included eight subparts, permitting respondents to answer *None,* or to indicate any of seven common library restrictions.

Among the respondents to the questionnaire, sixty-seven or 21 percent indicated that no restriction was placed upon the borrowing privilege for outsiders.

Subpart *b* asked whether outsiders could "check out reserve materials." One hundred and fifty respondents or 48 percent indicated that outsiders were not permitted to check out reserve materials. One library permitted overnight use of reserved books by outsiders, and one permitted borrowing of reserve books by high school students. But these were the only exceptions.

Subpart *c* asked if "high school students must have a slip from their school librarian each time they wish to check out materials." Of the total respondents to the questionnaire, thirty-seven or 11 percent indicated that this restriction applied.

One respondent noted that a high school student "must have a slip from his school librarian or teacher the first time . . . then we issue them a card for one year." Another responding library indicated that the high school student "must have a slip from his principal to take out a library card." Another accepts "verbal permission from their school librarian," still another issues a library card good for one semester. Other respondents noted such variations as "or an accompanying parent must sign," "student must present student activity card," "ALA interlibrary loan form is required," or "for overnight use only."

Subpart *d* of question 9 asked if a shorter loan period applied for outside borrowers. Nineteen or 6 percent indicated that qualified outsiders were given a shorter loan period. Of the com-

munity college library respondents reporting a shorter loan period, one commented that this restriction applied to high school students only.

Subpart *e* asked if outside borrowers were granted a renewal privilege. Twenty-four or 7 percent indicated that outside borrowers had no renewal privilege.

Subpart *f* asked if outsiders were permitted to check out journals. Ninety-nine or 32 percent reported that outside borrowers could not check out journals.

One community college library responding to subpart *f* added "This depends upon the imperative need, regardless of the person," while another indicated that journals could be checked out if they were bound.

Subpart *g* of question 9 asked if the library required "in-library use only" by outsiders. Seventy-two or 23 percent permitted in-library use only for outsiders. One library indicated that this restriction applied only to students from other colleges and not to other outsiders. Another said this restriction did not apply "to students of other colleges who live in bordering towns and have identification." One community college excepted alumni from this restriction; another excepted professional people.

The last subpart to question 9 provided space for respondents to indicate restrictions other than those specified. Responses here varied as follows: "May not check out more than three books at one time"; "Only material not needed by students may be borrowed"; "No books borrowed on ILL for outsiders"; "Cannot use phone/tape collection"; "Special personal application to head librarian needed in most cases"; "Must sign address and phone number"; "Material must not be available from other sources, i.e., public library, high school, university"; "Depends on who, why, what"; "Must be resident of college service area"; and "May limit number of items to people under 18 or not graduated from high school."

Question 10 asked: "Do you require qualified outsiders to complete an application or registration form?" Of the total respondents to the questionnaire, ninety-four or 30 percent answered yes, and 183 or 59 percent answered no. Thirty respondents or 9 percent indicated that this did not apply.

One respondent indicated that outsiders seeking the borrowing privilege "must be introduced by college personnel." Another that students from two neighboring universities did not need to apply or register. Still another indicated that the application had to come "via the business office."

Question 11 asked: "Is the qualified outsider provided with a copy of the regulations by which he is expected to abide?" To this, ninety respondents or 29 percent said yes, 168 or 54 percent said no, and for forty-eight the question did not apply. Some of those responding in the negative indicated that the applicant was given verbal instruction.

Community college libraries attempt, as do their college and university counterparts, first to satisfy the needs and requirements of their own academic clientele. And rightly so. In the few instances where fees or deposits are levied on outside borrowers, charges are, for the most part, negligible. As might be anticipated, many community college libraries do not permit borrowing of reserve books or journals by outsiders. These strictures are understandable, ". . . in view of the academic library's primary responsibility to students, faculty, and staff, who need some assurance that reserve materials will be available to support class assignments and that scholarly journals will be on the shelves for study and research purposes."[4] Where other restrictions exist they seem to derive from an honest consideration of limited staffing and extraordinary work load.

Findings from responses to questions 8 through 11 suggest a variety of lending services are provided the noncollege user among the 308 community college libraries which participated. A climate of permissiveness prevails and, if the outsider is not always accorded full-use privileges, neither is he fully denied.

Controls and Interlibrary Loans

EDWARD C. HEINTZ

Of the 217 junior college libraries which noted that they circulate books to the community at large, the survey does not reveal that recovery of the books is a problem of any magnitude. Although eight respondents or 3 percent checked legal action as a method of recovery, none specified the kind of legal action. Possibly because many are community colleges, some might be protected in this respect by municipal, county, or even state statutes. In contrast, only one of the 783 respondents to the college and university survey of 1965 on nonacademic use indicated legal action as a last resort.

Other methods of recovery reported hardly reveal more than might have been expected. Telephone calls are used most widely, with 191 or 62 percent suggesting that the telephone is an effective instrument for recovering material. Postal cards are also used extensively: 133 or 43 percent of the libraries use them, though one uses letters only, and another states "letter if outside local call range." As for sending a messenger, twenty-two or 7 percent said yes, which is about half the percentage of college and university libraries who indicated use of messengers. In neither case do we know whether the delinquent borrower is charged for this relatively expensive measure.

Other measures to retrieve delinquent materials are used by twenty-four or 8 percent of the responding libraries. Only ten of these specified the nature of "other" and some of these reveal the smallness of the community served, such as "word of mouth," "request when I see the person," "personal contact—community." Blacklisting, expressed as "withdrawal of loan privileges," is employed by only two libraries, and only two undertake to notify school authorities. One can only conclude that nascence is the state of one library whose comment is, "Haven't had to use any device so far."

At this point it may be of some interest to refer back to question 4, where seventy-eight libraries or 25 percent indicated that they did not lend to persons not in some way associated with the institution because of difficulties relating to control, *i.e.*, book recovery and collecting fines. Will this percentage become larger as library collections grow and as the population increases, or will it of necessity decline as state and federal aid expands? It is unlikely that librarians alone will determine the answer to this question.

Twelve respondents did not answer the question, "Do you check out materials indirectly through interlibrary loan to other libraries in your area (instead of directly to an outside borrower)?" Of the remainder, 157 or 51 percent said yes, and 123 or 40 percent said no. Sixteen or 5 percent wrote both, presumably as a result of choice on the part of the borrower.

The Number of Outsiders and the Materials Borrowed

GEORGE C. ELSER

Question 14 requested respondents to estimate the number of outside users that might be expected on a typical day. Nearly one-third replied that they had no outside users or not more than one on a typical day. Another third estimated that their libraries were visited daily by

one to four persons not connected with their institution, while 14 percent replied that between five and nine outsiders used their libraries. Only 10 percent said that their libraries were visited by more than ten outsiders on a typical day. Another 10 percent did not answer the question. It would appear that the typical junior college library is not flooded by outsiders.

Question 15 related to the number of books borrowed by outsiders or the number of books used in the library by outside users on a typical day. Answers to this question indicate that few books are borrowed by outsiders. Forty-eight percent of the libraries did not check out any books, or not more than one book, on a typical day. Twenty-two percent checked out one to four books, 13 percent five to nine books, and only 10 percent of the libraries checked out more than ten books to outsiders on a typical day. Outsiders made their greatest use of junior college libraries by using books in the library. Twenty-seven percent indicated that outsiders used no books or not more than one book on a typical day, 11 percent said that only one to four books were used, 18 percent responded that their in-library use amounted to only five to nine books, 12 percent reported an in-building circulation of ten to nineteen books, and 10 percent indicated that on a typical day outsider use approximated twenty to twenty-eight books. It seems likely, considering the statistics above, that even the smallest junior college library could support the limited use of its facilities made by outsiders.

A large majority of the respondents, 85 percent, replied in the negative to question 17, which asked if there were any legal strictures, such as the Education Code or institutional regulations which would prevent them from serving persons not connected with their institution. Only 5 percent said that they could not legally serve outsiders. Nine percent did not reply.

Since so many junior colleges feel that there are no legal restrictions to prevent them from serving outsiders and since 70 percent stated that they circulated materials to persons other than students, faculty, and staff (Question no. 3), it seems strange that so little outside use is being made of community college libraries by outsiders. There may be factors which militate against community use (such as the location of the college in relation to population centers), but it would seem that the community college could serve a great many more persons not connected with their institutions than they are now serving, thus raising the level of library service in their communities.

Publicly and Privately Supported Institutions

E. J. JOSEY

Since there is a growing number of publicly supported community colleges being established in the country, it was decided that information on financial support should be included in the survey.

Of the 308 institutions participating in the survey, 194 or 62 percent are publicly supported institutions while 105 or 33 percent are private institutions. Five or 1 percent of the reporting institutions indicated that they enjoyed both private and public support. Only three respondents did not answer this question.

In examining the extent to which library service is offered by both the publicly and privately supported institutions, no real discernible pattern emerged which would indicate a trend or indicate anything statistically significant which would show a greater response to sharing library resources with the community by either the publicly or the privately supported two-year col-

leges. On some questions the privately supported institutions were more community oriented than the publicly supported institutions. On others the reverse was true.

An illustration of this fact may be seen in question 3 relative to the circulation of materials to persons other than students, faculty, staff, and their immediate families. Surprisingly about one-half of the respondents who answered affirmatively were equally divided between the public and private institutions. Those who answered negatively were almost equally divided.

An examination of the question of charging user fees revealed that in more than 249 or 80 percent of the replies, no fee is required for using library collections. Of the nineteen that require a borrower fee, most are private. From this small sample it may be reasonable to assume that the public institutions are cognizant that their funds come from the public and are not likely to charge the local citizen for extramural service.

In a close scrutiny of a third question in this random selection of three questions to compare the publicly supported institutions' policies with those of privately supported institutions (question 17, which considers legal strictures as embodied in Educational Codes or institutional regulations), it is interesting to note that an overwhelming number, 263 or 85 percent, stated that no legal restrictions existed. On the other hand, upon a careful study of the small number, seventeen, that indicated that legal restrictions existed, more than one-half were private two-year colleges. If this sample truly represents the national picture and if conjecture is permitted, an evolving hypothesis may very well be that the minute number of two-year college libraries that have restrictions are the private institutions.

For the most part, the data do not emphasize conclusions which are statistically significant. Nevertheless, the answers to two of the three questions randomly selected and discussed above possibly show that the average publicly supported institution is less restrictive in its service to the community than privately supported institutions.

Institutional Characteristics of Junior Colleges Participating in the Survey

RICHARD C. QUICK

In addition to questions concerning services and privileges accorded by junior college libraries to persons not connected with the college, the committee's survey questionnaire also requested certain institutional data which might indicate the libraries' state of preparedness for service beyond the prior needs of the academic community.

Specifically, the questionnaire asked the number of volumes in the library, the number of full-time students and faculty (FTE), and the numbers of professional and clerical staff. The questionnaire also asked the population of the community in which the college is located.

Three hundred and seven libraries responded to the questionnaire's Institutional Data section. In terms of numbers of students and faculty served, size of staffs, and size of book collections, these responses indicate that a majority of the junior college libraries surveyed are not sufficiently prepared to satisfy the service obligations to their own academic communities. It would appear that where services and privileges are offered to outside users, such accommodations represent an expenditure of staff time and dispersal of book resources that may not be justified. Where library services and privileges are not extended to the outsider, it is probably because there are not adequate personnel or material

resources to support such an accommodation.

Collections and Enrollment Data

The *Standards for Junior College Libraries*, developed by the ACRL Committee on Standards (1960), recommend that a junior college library of up to 1,000 students should have a book collection of at least 20,000 volumes. The *Standards* suggest that the collection should be increased by 5,000 volumes for every 500 students (FTE) beyond 1,000.[5]

Of the respondents supplying information on the number of volumes in the library, 50 percent reported collections of less than the ACRL's recommended 20,000 volume minimum. Of those libraries supplying data on the number of students enrolled, 54 percent reported student bodies in the range of 1–999. In an institution-by-institution comparison of book-stocks and enrollments, it was found that 119 libraries reported serving student enrollments of up to 1,000 students with less than the recommended minimum 20,000 volumes. Thirty-four other libraries were found to be serving student enrollments of more than 1,000 students with collections below the recommended minimum 20,000 volumes. In addition, roughly three-quarters of the libraries with subminimal collections were also called upon to satisfy study and research needs and services to faculties numbering from thirty to fifty.

Staff Data

The ACRL *Standards* recommend two professional librarians as the minimum number required for effective service in a junior college with an enrollment up to 500 students (FTE), and that there should be at least one nonprofessional staff member.

Three hundred and five junior college libraries responding to the questionnaire reported professional staffs ranging from one to nine members. Of the respondents, 117 or 38 percent indicated one professional staff member: sixty-four reported serving student bodies ranging from 500–999; and eight reported serving student bodies ranging from 1,500–2,000 students. Two libraries reported one professional librarian serving student bodies numbering in excess of 3,000 students.

Eighty-five responding junior college libraries reported two professional staff members. In this group an institution-by-institution comparison of numbers of staff and numbers of students enrolled revealed: eighteen professional pairs serving student bodies ranging to 499 students; twenty-eight professional pairs serving student bodies ranging from 500–999 students; sixteen professional pairs serving student bodies ranging from 1,000–1,499 students; twenty professional pairs serving student bodies ranging from 1,500–2,999 students; and three pairs serving student populations in excess of 3,000 students. Three libraries specified no professional staff.

Two hundred and seventy-nine libraries reported clerical staffs ranging to fifteen members. Of these, seventy-four indicated one; sixty-seven indicated two; forty-five indicated three; fifty-eight indicated four–five; and thirty-five indicated more than six clerical staff members. Twenty-five libraries reported no clerical assistance.

Of the 117 libraries reporting only one professional staff member, 14 percent indicated no clerical assistance, 33 percent indicated one clerical assistant, 26 percent indicated two clerical assistants, and 14 percent reported clerical staffs ranging from four or more.

Of the eighty-five libraries reporting two professional staff members, 8 percent indicated no clerical assistance, 22 percent indicated one clerical assistant, 31 percent indicated two clerical assistants, and 16 percent indicated three

clerical assistants. The remaining eighteen libraries reported clerical staffs ranging from four or more.

Population Data

Two hundred and ninety-nine junior college libraries supplied population totals for the communities in which they are located. Of these, ninety-three or 30 percent reported populations of less than 10,000; ninety-three or 30 percent reported populations of 10,000–50,000; thirty-six or 11 percent reported populations of 50,000–100,000; sixty or 19 percent reported populations ranging from 100,000–1,000,000; and seventeen or 5 percent were located in communities in excess of one million.

Responses to the questionnaire indicate that more than sixty-two of the junior college libraries surveyed are located in communities of less than 50,000 persons. In the case of ninety-three libraries reporting populations of less than 10,000, theirs may well comprise the only significant book collections within easy reach of the community at large, and there may be unusual pressures upon these to assist with community library services. It should be noted that thirty-seven of the libraries shown to be understaffed and understocked, in terms of the ACRL *Standards,* are located in communities of less than 50,000 persons. Both groups, while not fully prepared to supply the library needs of the academic community, do render community services in varying degree, either as a substitute for nonexistent public library resources, or to supplement a limited public library resource.

Responses to the questionnaire's Institutional Data section showed that a significant number of the junior college libraries surveyed are disadvantaged in terms of staff and collection sizes as compared to numbers of students and faculty serviced. Where full or partial access is granted to outsiders, it would seem that this accommodation could impose a further strain on the library's already inadequate personnel and material resources.

Significance of the Findings to Junior College Libraries

E. J. JOSEY

When it was reported that the State Agricultural and Technical College at Farmingdale, New York, would become the first college on Long Island to open its library to general public circulation, some community-minded citizens felt that this new policy was just a natural extension of community service by a two-year college. Residents had always been allowed to use library facilities, but they had not enjoyed the privilege of borrowing library materials. Generally, community colleges or junior colleges in recent years have become anxious to extend services to the wider community. Naiman and Konneim support this view when they declare that "with the growth of the community college there may be more and more opportunity for such extension of the college beyond its campus at little cost to itself and at considerable benefit to the larger community for which it can be a valuable source of information."[6] There can be no quarrel with such objectives; however, in terms of extending library service to the larger community, while most institutions offer some kind of service, a varied and multicolored picture emerges.

Scott's analysis of the question on the circulation of materials disclosed that although 91 percent of the respondents allow in-building use of materials, only 70 percent permit borrowing privileges. Various reasons were cited for not granting circulation privileges; the largest group responding indicated that their libraries possessed insufficient material. The most acrimonious comment came from a Texas librarian, who declared

". . . we have sabotaged ourselves by all of this talk of 'free library service.'" Obviously he has not moved far from the concept of each little library working in isolation attempting to serve its public without any desire to join the emerging cooperatives and networks intended to strengthen library service to all types of libraries and library users. One wonders what his reaction is to the heavy burden that college students place on the public library. The National Advisory Commission on Libraries in its report has strongly recommended that libraries join networks. Hence, it is essential for libraries of all types, and especially two-year college libraries to join cooperatives in order to strengthen total library service in their region.[7]

By and large, most of the two-year institutions have not formulated policy statements which govern the use of their libraries by outsiders. Smith found that some evidently do not feel the need for a written statement, and more than half of the reporting libraries permit free access by the general public. Of the various categories of users, it appears that high school students are not welcomed at junior college libraries, and this finding coincides with the survey of community users of college and university libraries mentioned earlier.

In his investigation of the conditions under which unaffiliated users may use junior college libraries, Quick reported that more than 80 percent do not charge a fee for the use of library materials. This fact may mirror the parent institution's philosophy to extend itself into the greater community beyond the college. It can be assumed that the small number that charge fees do not do so in order to deny library service, for the fee is too small. If one would assume that the fee is to be a deterrent to outsiders, ambitious researchers—faculty and/or students—will pay to acquire the highly desired materials for study or research, thus, the fee will never constitute an insurmountable barrier.

This discourse could very well close with a quote from two authors who are considering another important service to the community and seems quite applicable to libraries. "Here, it would seem, is an example of one of the real challenges to the community college: namely, relating to its neighbors not only by offering formal education to the young but also by providing a resource to the adult and professional populations in need."[8]

The enforcement of adequate controls over materials loaned and correspondingly the sending of materials via interlibrary loan in lieu of direct loan are matters that are in the hands of librarians. The telephone seems to be the most effective communications medium for recall of materials from local outside borrowers. With reference to interlibrary loan, Heintz reveals that 51 percent indicate that materials are sent on interlibrary loan rather than given directly to an outsider, and 40 percent disavowed using interlibrary loan in this manner. The results here do not correspond to question three in which it was found that 70 percent extend circulation privileges to persons other than students, faculty, staff, and their immediate families. There is the possibility that the respondents extend materials to outsiders via interlibrary loan under certain conditions. The results do not warrant assumptions. This dilemma points up the major weakness of the questionnaire method—the differing interpretations of questions by respondents.

The opening of the floodgates and being inundated by masses of outside users "syndrome" is, of course, played down by the respondents, for Elser points out that 32 percent replied that they served no outsiders or less than one on a typical day. Another 32 percent reported serving from one to four outsiders and an

examination of the amount of materials borrowed reveals that this is negligible. In terms of legal restrictions, only 5 percent reported having such regulations. From the foregoing facts it appears that the libraries of two-year colleges are not suffering from the demands of unaffiliated users. When two-year colleges become part and parcel of a national informational system, their present outside clientele will not prevent other newcomers from tapping their resources as well.

Library service from publicly supported two-year colleges versus library service from privately supported two-year colleges, as this writer stated earlier, is not statistically significant to report except in a couple of instances where it appears that publicly supported institutions may be a few degrees more progressive in terms of community service.

In his characterization of the junior colleges participating in the survey, Quick shows very tellingly and graphically that most of the institutions surveyed do not meet ALA standards in terms of collection and staff. The National Advisory Commission on Libraries corroborates his findings in these words: "As college enrollments have increased since World War II, we have witnessed an almost phenomenal increase in the number of junior and community colleges. In no other type of institution serving higher education are library shortcomings so glaring. The great majority of library collections of junior colleges are considered substandard. . . ."[9] The next question that should be posed is the following: why should junior college libraries attempt to serve the general public with such meager resources? One possible answer may very well be the revelation from the National Advisory Commission on Libraries that "more than two-thirds of all public libraries fail to meet American Library Association (ALA) standards as to the minimum adequate size of collections, and not one in thirty meets ALA standards for per capita support."[10] Therefore, out of necessity, townspeople flock to the libraries of two-year colleges hoping to find what they do not find in their public libraries. The problem is further compounded, because a majority of the two-year colleges surveyed are located in towns of less than 50,000 population and, in too many instances, access to the junior college library is necessary for reference and research.

Finally, without a doubt, this survey clearly shows that most two-year college libraries permit some degree of access to their library collections and resources. Even the concept of legal restriction in itself is not a barrier to outside users. Even the one librarian who contended that "each type of library has its own 'public' that supports it and for which it shall supply resources" constitutes an infinitesimal minority.

What does the future portend for community use of junior college libraries? As library networks and informational systems emerge, the dividing lines between library jurisdictions will continue to erode, and the junior college library will play a vital role in providing materials to all qualified users.

References

1. E. J. Josey et al., "Community Use of Academic Libraries: A Symposium," *College & Research Libraries* 28:198–202 (May 1967).
2. In this symposium, the authors will refer to the junior college intermittently as junior college, community college, or two-year college; whatever term is used it refers to an institution providing two years of college-level work

equivalent to the freshman and sophomore years of college.

3. E. J. Josey et al., "Community Use of Academic Libraries."
4. Ibid., p.199.
5. American Library Association, Association of College and Research Libraries, "Standards for Junior College Libraries," *College & Research Libraries* 21:200–206 (May 1960).
6. Dorothy N. Naiman and Beatrice G. Konneim, "The College and the Extra-Campus Community," *Adult Leadership* 118 (Oct. 1963).
7. U.S. National Advisory Commission on Libraries, *Report of the National Advisory Commission on Libraries. Library Services for the Nation's Needs; Toward Fulfillment of a National Policy* (Washington, D.C. 1968), p.3.
8. Moses S. Koch and Priscilla M. Woolley, "The Economic Opportunity Act: An Opportunity for Community Colleges," *Junior College Journal* 36:28 (Oct. 1965).
9. U.S. National Advisory Commission on Libraries, *Library Services for the Nation's Needs,* p.22.
10. Ibid., p.24.

Letters

To the Editor:

I will not debate the statements about faculty members' attitude towards librarians and their not very satisfactory performance in book selection in J. G. Schad and R. L. Adams, "Book Selection in Academic Libraries: A New Approach," *CRL* 30:437–42 (Sept. 1969). But I am going to explain the book selection system in the St. Paul Campus Libraries, University of Minnesota, with the hope it will supplement the article.

The purpose and goal of the library material selection system is to secure a good book collection. That raises an immediate question—which is a good book collection? We can accept that in a University library it is a collection which possesses the titles needed for studies according to the campus curriculum (textbooks usually are excluded) and for scholarly research projects, conducted in this particular campus of the University. In other words it should be a workable, streamlined and up-to-date collection.

The book collection system in the St. Paul Campus Libraries is based on a close cooperation between faculty members and the Library's professional staff. Each college or department head was asked to appoint a library committee consisting of faculty members. All the faculty members have been urged to examine the current bibliographical literature, each in his subject field, and then submit their suggestions for purchase to their library committee. Emphasis is on a streamlined and up-to-date collection. The Library collection should be without gaps but also without alarming protruders. The departmental library committees send the book requests to the Acquisitions Division in the Central Library.

Each professional librarian in the Library is assigned responsibility to check the current bibliographical literature in a particular subject area from the curriculum and research programs of the St. Paul Campus. They also must check reference titles and titles of more general interest. After a comparatively short time, the librarians acquire a rather good "reading knowledge" in their assigned fields.

The departmental library committees are nicely cooperating with their opposite members on the Library's staff in a mutual effort to build a workable, up-to-date library collection. By this work of cooperation, the Library encourages a wide participation of faculty members as experts in their subject fields and professional librarians to achieve the goal: a workable, streamlined, and up-to-date book collection.

After some years of experience, this book selection system seems to work well. The faculty accepted their participation in the book selection very enthusiastically. There was not even one case of refusal to do that. Acquisitions orders are much more evenly distributed among the colleges and departments on the campus than formerly was the case. The collection is becoming more workable, streamlined, and up-to-date.

It seems to me that this system has value for the suggestions in the above mentioned article.

Verners J. Vitins
Assistant Professor and Head Librarian
St. Paul Campus Libraries
University of Minnesota
St. Paul, Minnesota

To the Editor:

Messrs. Downs and Heussman briefly stated the difficulties in determining standards for university libraries which makes us all the more indebted to them for undertaking the task. [Standards for University Libraries," *CRL* 31:28–35 (Jan. 1970)]

Nevertheless, I wish to take issue with their basic premise that criteria for excel-

lence should be based upon the fifty *largest* libraries. It is quite true that they did not say they were surveying the fifty largest libraries, but in the report to ARL their listing reveals they subtracted seven libraries from the fifty largest U.S. academic libraries and added another seven libraries (including Toronto and McGill) to bring the total back up to fifty. Therefore, 86 percent of the libraries looked at are listed as being among the fifty largest U.S. academic libraries.

Those libraries that rank below the largest fifty libraries are well aware of that fact. I question if the giving of raw data—dollars spent, volumes added, staff, etc.—is meaningful to "smaller" institutions. It is the next fifty largest that are in even more need of standards.

At first glance the use of relationships seems to be an approach that will bear useful results. Yet at the same time I have some misgivings that the relationships derived from the largest libraries may be way out of reach for a lesser institution and therefore the usefulness of such relationships as a standard is impaired.

Perhaps three or four standards should be developed for libraries according to the size of collection or graduate/undergraduate ratio. This would enable growing libraries to see more clearly the standards they are striving for as well as the standards they wish to leave behind.

I know that Downs and Heussman have not completed their work and so until then I can only await their rationale. Eventually I hope they will get around to commenting on:

How the number of branch libraries or an undergraduate collection skews the figures.

How the graduate/undergraduate ratio affects the library's statistics for expenditures, seating, etc.

If the number of librarians in administration or technical processing says anything about a library.

What ratios contribute positively to a profile of a library?

How HEW statistics on libraries can be better utilized when comparing libraries.

Richard Heinzkill
University of Oregon

To the Editor:

In the March, 1970, editorial, Dr. Dougherty discusses, in addition to other topics, methods of improving library management as a way of alleviating professional discontent—especially among the younger professionals. His thesis states that the younger professionals are dissatisfied, expect more challenging positions, and want more opportunities for promotion. The purpose of this letter is to expand and develop his theme and to comment on his proposal for a management intern program by taking into account a number of the important variables necessary for the formation of a successful internship.

Although the opportunities available in the 1970s for personal fulfillment in work situations are unique, keeping professional librarians and attracting new people of high caliber to the field are becoming more difficult due to increased competition from other professions. Today's competition is keen enough to warrant such new approaches as Dougherty's which do more than pay lip service to one of the profession's biggest ailments. To fulfill our manpower needs, positive, forceful, innovative, and direct action is needed.

Library school graduates complain that their library school training is not being utilized, while administrators argue that the recent library school graduate is not equipped to meet their needs. As Lester Asheim has pointed out in *The Core of Education for Librarianship,* the library school graduate is equipped with the background and theory of librarianship and is at that point on the threshold of his professional career: "The educational program should prepare the student to become a librarian; it does not turn out a completely expert librarian upon graduation."

It is fine to talk about more challenging positions and greater staff participation, but, as Dougherty has said, "to achieve meaningful staff participation, we must begin to train young middle-management librarians for top administrative positions." The result of the program which aspiring administrators have often followed is that traditional methods are perpetuated and innovation is stifled.

New methods of training are possible on

both a formal and an informal basis. Dougherty has suggested that a formal plan for administrative internships be initiated, with the ACRL and/or ALA playing leading roles. While this is only one aspect of the solution, it is an essential one, and positive attempts toward its fulfillment would represent an important advance toward achieving the goals of the profession.

Such a program presupposes an attitude of receptiveness on the part of present top management—both in allowing staff to participate in such a program and in setting up the program itself. Top administrators will have to be willing to incorporate a risk element into the management of their libraries. Traditionally, administrators have tended to make important decisions themselves, leaving the implementation to the staff. Such procedures train good followers, not good leaders.

Not only is a positive attitude towards internships necessary, but also visible support must be forthcoming. Funding to assist in the organization of such programs could be obtained from such agencies as ALA, ACRL, and USOE. Some of the training programs funded by the National Library of Medicine for medical librarians could serve as a prototype for the management training programs.

Dougherty's suggestion is directed at academic libraries; this appears, however, to be too narrow a base upon which to work. Because the management problem is one which exists in other types of libraries as well, it would seem that a variety of programs aimed at developing administrators for all types of libraries would be desirable. The ensuing cross-fertilization should be important for the future development of information networks which will call for close cooperation among all types of libraries.

To operate most effectively after completion of the program, the intern should not return to the same position he formerly held. Rather, the completion of such a program should serve as a springboard to a more responsible position in another library.

If the internship is to be relevant and effective, the intern must be completely integrated into the decision-making process. The library which undertakes an intern program will have to expect a certain amount of disruption of daily routines because of the infusion of the intern into the relatively predictable library organization. The resultant program must foster growth not only in the interns but also in the parent institution. Because of this, it is imperative that the program set up for the incipient manager should not be "how we do it good in this library." Obviously, imitation of the traditional will not bring about innovation and creativity. Internships certainly will not solve all the management problems of librarianship; however, they can be a start toward the implementation of needed changes.

Fred W. Roper and
Richard J. Vorwerk
USOE Doctoral Fellows
Graduate Library School,
Indiana University

To the Editor:

The administrative intern program which you propose in the March issue [CRL, March 1970] may have its merits, but I doubt that it would do much to alter the climate in libraries or alleviate the boredom and frustration you describe. The statement "to achieve meaningful staff participation, we must begin to train young middle-management librarians for top administrative positions" seems rather questionable. I would suggest instead that the way to achieve staff participation is to have the staff participate, and to stop thinking of administration as the only fit outlet for talent in a library. Is there really no more to reference work than either serving as a human signpost or directing the activities of a corps of signposts? Unless there is, our claims to academic status are shaky indeed.

The two issues, status and internal library management, are not separable as you suggest, but quite closely connected. At the heart of the status problem is the faculty member's perception of the differences between the librarian's situation and his own. The professor regards himself as holder of the highest status academia has to offer. All the rewards of professional achievement are accessible to him in the job he has. His status does not derive from a slot in a hierarchical table of organization, and he need not become a department chairman or

dean in order to advance his career or be considered successful. Under the circumstances, he is most reluctant to accept as his peers people as obviously subordinate and inconsequential as are "ordinary" librarians *vis à vis* their ostensible colleagues, the occupants of "top administrative positions."

These thoughts have been expressed repeatedly during the past few years, in the columns of *College & Research Libraries* and elsewhere. Perhaps the linking of the status and management issues at Atlantic City is a sign that the argument is gaining ground, albeit slowly.

Mrs. Thelma Freides
School of Library Service
Atlanta University

To the Editor:

John Moriarty's "Academic In Deed" (January 1970) is plump with wisdom for the librarian and the administrator. I would not quarrel with any part of it, but the implication in the first paragraph that equal status for a typical librarian might include a twelve-month appointment is unfortunate.

Academic status for librarians requires the academic year in order for them to meet the obligations of scholarship, research, and publication. Even to give librarians the option of working the longer period is to ensure that they will not meet their academic obligations, which in turn will mean that the long hard struggle for academic status has been wasted. Librarians must have assignments of the same length as the rest of the faculty if they are to meet the same academic standards.

Some librarians might be requested to continue for the fourth quarter at extra pay, but the decision for this should rest with the director of the library, who should be concerned about the professional development of his staff. Any librarian who needs to return to school, or to do some research, in order to obtain tenure or promotion should be advised that he will not be hired during the fourth quarter until he has met those requirements.

Any director who gives twelve-month assignments to librarians merely for his own convenience in operating the library, without due concern for their professional growth, will be sabotaging the profession and the individual librarians as well as his own library's future.

R. Dean Galloway
College Librarian
Stanislaus State College

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CORRECTION

An article, "Fringe Benefits for Academic Library Personnel," by James Wright in the January 1970 issue listed Iowa State University as having an enrollment under 5,000 while its present enrollment is 19,172.

Recent Publications

BOOK REVIEWS

Library Response to Urban Change: A Study of the Chicago Public Library. By Lowell A. Martin. Chicago: American Library Association, 1969. 320p. $8.50.

Like a bogged down dinosaur, struggling feebly, while its healthy neighbors fed upon it, the Chicago Public Library was sinking slowly. Then the alarm was sounded. The afflictions and deficiencies of the library were agonizingly detailed in a series of newspaper articles. The second city was shamed. What to do? Citizens sprang into action. Experts were asked to examine the patient.

It is highly appropriate that the consultants were headed by Dr. Lowell Martin, a Chicago native, former member of the C.P.L. staff, one of the most knowledgeable and highly respected public library experts. Dr. Martin has provided a model study, both practical and farsighted, based on deep understanding of the potential capabilities of the public library. The report is studded with helpful maps, tables, charts and graphs.

The basic premise is that "the urban condition calls for something more than 'business as usual.'" It is pointed out that "Chicago, with other cities, will not be allowed many mistakes; either it will maintain its institutions of communication and understanding, or it will lose power and validity." The Chicago Public Library is called upon to aim for "excellence and innovation" and "to adjust to the people of the city in all their diversity, rather than expecting the people to conform to a standard institution."

Dr. Martin says, "The problem is not to remake our libraries into something other than libraries—a new form of school, a community meeting place, an amusement center—but rather to take the inherent strength of a 'library,' as a resources center with materials for self-realization, and relate it to the multifarious interests of a society that is re-examining itself." The report outlines a dynamic "library response to urban change."

Beginning with analysis of the people in their varying levels of education, interests, needs and ethnic differences, the report inquires into the library's public services and personnel and technical services. It recommends use of the new technology, including computers. Then come organization, financial support, and administration. The responsibilities of the library as a chief communication and research agency in the metropolitan area are recognized. Creative solutions for the central building, regional organization, and branch problems are offered. Inner city library service is stressed.

Two recommendations show the advanced point of view of the report:

> At whatever level, library resources will be as much film as print, as much sound as words, as much leaflet as book.
>
> The various outlets and units of the Chicago Public Library will be linked by communications connections for sight and sound which will make resources available rapidly at any point in the system.

In setting forth the priorities for the next decade, Dr. Martin lays it on the line: "Three ingredients are essential . . . the will to change and develop, money to pay the way, and personnel to get the job done."

It will be interesting to see if these ingredients are marshaled to revitalize this library. The next moves are up to the Chicago elected officials and library trustees. Dr. Martin and his enlightened associates have diagnosed the ailments and prescribed the treatment. If their advice is followed, a torpid institution will come alive as a source of pride for Chicago and an example to be followed by other cities.

Library Response to Urban Change is required reading for librarians. If they use its fertile ideas in their planning, the citi-

zens will benefit enormously. Every city can and should have such a library as Dr. Martin envisions for Chicago, a "nerve center . . . for contemporary information, in substance functioning as the fact bank, information switchboard, and special library for the general populace."—*Edwin Castagna, Enoch Pratt Free Library.*

Library Automation; a State of the Art Review. Ed. by Stephen R. Salmon. Chicago: American Library Association, 1969. 175p. $7.50. (73-77283).

The papers presented at the ALA Preconference Institute on Library Automation at San Francisco in June 1967 constitute this volume. The purpose of the institute was to inform ALA members of the state of the art of library automation. It achieved its purpose, and with the principal exception of on-line applications described since 1967, it still constitutes an informative review for librarians not directly involved in research and development.

Separate sections of the report are devoted to acquisitions, cataloging, serials, and circulation, but the publication lacks an adequate review of information retrieval. Necessarily lacking are descriptions of on-line systems in acquisitions, serials, and circulation that have been activated since 1967.

Other sections discuss the MARC Project at the Library of Congress, networks, system analysis and design, and buildings. The MARC Project has had major developments since 1967, which of course are not in *Library Automation.* On the other hand, system analysis and design is a timeless topic. One of the most interesting sections is that by Robert H. Rohlf entitled "Building-Planning Implications of Automation." This section does not give cookbook answers to those who wish detailed replies to the question "How will library automation affect the building I am planning?" but it does give a valuable basis from which effective planning can proceed.

Library Automation will be a useful and informative publication for some years to come.—*Frederick G. Kilgour, The Ohio College Library Center.*

Cataloging U.S.A. By Paul S. Dunkin. Chicago: American Library Association, 1969. 159p. $5.00. (69-17830).

Paul Dunkin has given us a brief survey of cataloging theory in the United States. He prefaces his book with an annotated list of the most influential writings on cataloging; after which he summarizes the cataloging codes from Cutter's on. Then, under each problem area—entry, description, subject, classification, the catalog—he discusses the major points of view and their theoretical bases. His expressed intention is to show why we catalog as we do.

The categories, assumptions, and objectives of the transcendent theories are presented with clarity. We see how we arrived at our current practices, that they do not form a coherent whole and reflect historical not logical development. They are largely "the accumulation of what has been done in LC" (p. 143), a compromise of conflicting bibliographical objectives, particularly of conflicting theories on "the public's needs and/or wants. (They are not necessarily the same.)"

We index the book collection both to locate a work and to relate it to other works. That is our first principle. Cataloging attempts to do this systematically, and parts of Cutter's coherent but expensive system still stand. Parts have fallen under attack. But no matter how cogent or inviting later theories have been, the system has remained closed to any but peripheral and compromised changes, adopted usually for economic reasons and tending to make the system a less coherent whole. Mr. Dunkin shows us why we have arrived at our current practices. We all know what they are and what problems they raise in application and comprehension. Thus we enter works on "principles of authorship," not according to the title page statement the author and publisher have agreed on. Our forms of entry reflect wave after wave of opinion. We relate some types of material by added entries, others by uniform titles, and still others by form headings. Our subject headings reflect a number of views on the uses of language, and a continual reduction of attempts to apply them systematically or to relate them fully. MARC finds it necessary to bolster our descrip-

tions with explicit statements on such points as language of text, country of origin, and index. Even the paging statement, shown to be most important in establishing editions, has gone wild with the acceptance of Title II descriptions. The catalog gets larger and more confusing.

The attempt to tie cataloging at least physically to books was dismissed ten years ago in the Library of Congress' *The Cataloging-in-Source Experiment.* This report, called by Dunkin "an amazing document," is one still deeply resented by catalogers outside the Library of Congress, who did not feel the experiment's pressures. Nothing since has promised immediate practical relief. Attempts to tie cataloging more logically or even more simply to books have added to the cost or to the confusion or to both.

Mr. Dunkin has tried to limit himself to descriptive rather than critical analysis. The reader will be grateful to have the history laid out concisely. This is an important book, intelligently done; if it emerges as a kind of epitaph to cataloging theory as we have known it, perhaps machines will someday release us and give us a chance at theories again.—*Lois Hacker, Cornell University Libraries.*

Prolegomena to Library Classification. 3d ed. By S. R. Ranganathan, assisted by M. A. Gopinath. New York: Asia Publishing House, 1967. 640p. (73-427373).

It is with deep gratitude that I remember my first encounter with the *Prolegomena.* It (then in its second edition) opened my eyes with its clear statements of the problems of classification, as well as with its amazing revelation that anyone had gone so far toward their solution. This third edition is not a revision in the usual sense, but rather a development of those parts of the second edition of the greatest generality, excluding much of the historical, speculative, and practical discussions which (the author informs us) are being developed in two other books: *Classification: Retrospective and Prospective,* and *Depth Classification and Its Design.* Thus the new *Prolegomena* consists, in a way, of three separate titles. Libraries with the second edition should not retire it to inactive storage unless they acquire all three new titles.

If there is a work in which is concentrated (and the word must be taken in a very strong sense) all that is most germinal in the theory of classification, it is the *Prolegomena.* Nothing else can rank with it except the 1876 Dewey and Cutter works, and perhaps the Gardin team's *L'Automatisation des Recherches Documentaires.* In this new incarnation it has become more than ever nothing but what-must-be-considered-before . . . , less a survey that includes prolegomenal matter. No one (except the beginning student, who would in all but a very few cases be quite put off by the unaccustomed rigor of the mode of exposition and who would be in principle unaware of the *aporia* in the *praxis* that have led to this *theoria*) who is serious about understanding, constructing, applying, or using any classification or system of indexing can afford to be uninformed about what Ranganathan works through here.

The new edition would better have been (like the second) printed in England; there are misprints in abundance, though most are not too serious—just irritating. But there are a few weaknesses of a more serious sort. Interpolation (internal hospitality) in chain (§LG) is not really explained, though Ranganathan along with everyone else assumes that Dewey's radix-fractional principle makes it possible. But it may instead be that only a faceted notation does—and then only in a somewhat weak sense. Dichotomy is discussed in the proper pejorative light (§PG), but its real function (positive/negative = enumeration/"others") is not mentioned. Figure 16 (p. 367) is intended to show the complexity of "the tree of knowledge"; it is so complex as to confuse, and the lack of explanatory text makes it not a help but a hindrance to the reader. UDC is made to seem to have Anteriorising Common Isolates (p. 448-449), which would assuredly surprise most of its adherents; the lack of phase-relational flexibility in UDC (p. 462) is largely true, but the pioneer efforts of Kervègant have led at least to an official test of a relator-schema of my own

concoction. Author codes made up of letters and numbers are attacked (p. 504) without seeming awareness that a considerable shortening of the notation can thereby result. CC is taken (§U) as the only system that concerns itself with anything beyond class numbers, but LC is at least a partial example (by enumeration) of another which does. The discussion of "dimension" (§QA) is not at all clear, especially in §QA3. Finally (and most seriously), the proposal to move all Problem facets into the Matter category (§RB) seems to me a great mistake, even though the similar thematic location of Property facets there is good. Ranganathan seems rather caught in the PMEST (Personality, Matter, Energy, Space, Time) categorization. If there were *three* categories (Static aspects, Dynamic aspects, and Environmental aspects), the first would clearly absorb P and M (including Property), the second would correspond to E (including Problem), and the third would surely take in S and T. To make some such new attempt is even recommended (p. 298); Ranganathan, like Aristotle, is too easily charged with an undeserved dogmatism. On p. 267 he mentions how "sheer repetition" led Bliss to a "dogmatic creed" in regard to "Economic Limit of Notation." What we must do is to penetrate (in all such cases, as well as in these three) to the animating quest beneath the crust of exposition.—*J. M. Perreault, University of Alabama in Huntsville.*

BOOKS RECEIVED

NOTE: *The titles listed represent books received at the editorial office that may be of interest to academic librarians.*

Bricker, George W., comp. *Bricker's Directory of University-sponsored Executive Development Programs.* 1970 ed. Wilton, Conn.: Bricker Publications, 1969. $40.00. (73-110249).

Children's Books in Print 1969. New York and London: R. R. Bowker, 1969. 605p. $11.50. (70-101705).

Clapp, Jane. *Sculpture Index. Vol. 1: Sculpture of Europe and the Contemporary Middle East.* Metuchen, N.J.: Scarecrow Press, 1970. 924p.

Davies, Ruth Ann. *The School Library—a Force for Educational Excellence.* New York and London: R. R. Bowker, 1969. 386p. $9.95. (70-94511).

Edson, Jean Slater. *Organ Preludes; an Index to Compositions on Hymn Tunes, Chorales, Plainsong Melodies, Gregorian Tunes and Carols. Vol. 1: Composer Index; Vol. 2: Tune Name Index.* Metuchen, N.J.: Scarecrow Press, 1970. 1169p. $30.00. (SBN 8108-0287-2).

Four College Libraries; Union List of Journal and Serial Holdings as of July 1, 1969. 4th ed. Amherst, Mass.: University of Massachusetts Library, 1969.

Gilbert, Dorothy B., ed. *Who's Who in American Art.* 10th ed. New York: R. R. Bowker, 1970. 548p. $25.00. (36-27014).

Husband, Hugh P., Jr. *Management Faces Unionization.* New York: Management Sourcebooks, 1969. 262p.

Index to 8mm Motion Picture Cartridges. New York and London: R. R. Bowker, 1969. 402p. $19.50. (72-91716).

International Literary Market Place 1970. New York and London: R. R. Bowker, 1970. 236p. $10.00 (65-28326).

Jenkins, Frances B. *Science Reference Sources.* 5th ed. Cambridge, Mass.: The MIT Press, 1969. 231p. $2.95 paperback; $10.00 hard cover. (73-95001).

Kroepsch, Robert H., and Thompson, Ian M., comps. *Urban and Minority-centered Programs in Western Colleges and Universities.* Report of a WICHE Staff Survey Made in the Spring, 1969. Boulder, Colo.: Western Interstate Commission for Higher Education, 1969. 69p.

Landau, Robert A., and Nyren, Judith S., eds. *Large Type Books in Print.* New York and London: R. R. Bowker, 1970. 193p. $10.00. (74-102773).

Library Automation. *Computer-produced Book Catalog.* White Plains, New York: IBM, Data Processing Application, 1969. 41p.

Long, Harriet Geneva. *Public Library Service to Children; Foundation and Development.* Metuchen, N.J.: Scarecrow Press, 1969. 162p. $5.00. (SBN 8108-0291-0).

MacKay, Donald M. *Information, Mechanism and Meaning.* Cambridge, Mass.: M.I.T. Press, 1969. 196p. $2.95 paperback; $8.95 hard cover. (73-78098).

Peterson, Carolyn Sue. *Reference Books for Elementary and Junior High School Libraries.* Metuchen, N.J.: Scarecrow Press, 1970. 191p. $5.00. (72-8294).

Theis, Paul A., and Henshaw, Edmund L., Jr., eds. *Who's Who in American Politics.* 2nd ed. 1969–1970. New York and London: R. R. Bowker, 1969. 1334p. $27.00. (67-25024).

Thomison, Dennis. *Readings about Adolescent Literature.* Metuchen, N.J.: Scarecrow Press, 1970. 222p. $5.00. (SBN 8108-0282-1).

Tompkins, Margaret, and Shirley, Norma, comps. *A Checklist of Serials in Psychology and Allied Fields.* Troy, N.Y.: Whitson Publishing Co., 1969. 262p. $10.50. (70-97477).

Warnow, Joan Nelson. *A Selection of Manuscript Collections at American Repositories.* National Catalog of Sources for History of Physics, report no. 1. New York: Niels Bohr Library, Center for History and Philosophy of Physics, American Institute of Physics, 1969. 73p.

ABSTRACTS

The following abstracts are based on those prepared by the Clearinghouse for Library and Information Sciences of the Educational Resources Information Center (ERIC/CLIS), University of Minnesota, 2122 Riverside Avenue, Minneapolis, Minnesota 55404.

Documents with an ED number may be ordered in either microfiche (MF) or hard copy (HC) from ERIC Document Reproduction Service, National Cash Register Company, 4936 Fairmont Avenue, Bethesda, Maryland 20014. Orders must include ED number and specification of format desired. A $0.50 handling charge will be added to all orders. Payment must accompany orders totaling less than $5.00. Orders from states with sales tax laws must include payment of the appropriate tax or include tax exemption certificates.

Documents available from the Clearinghouse for Federal Scientific and Technical Information, Springfield, Virginia 22151 have CFSTI number and price following the citation.

SPIRES (Stanford Public Information Retrieval System). Annual report (2d, 1968). By Edwin B. Parker and others. Stanford University, Calif.: Institute for Communication Research, 1968. 136p. (Available from CFSTI as PB 184 960, MF—$0.65 HC—$3.00).

During 1968 the name of the project was changed from "Stanford Physics Information Retrieval System" to "Stanford Public Information Retrieval System" to reflect the broadening of perspective and goals due to formal collaboration with Project BALLOTS (Bibliographic Automation of Large Library Operations using a Time-Sharing System). The primary facility under development is still the computer information system for on-line reference retrieval. The file language techniques used are essentially as described in the 1967 report. The computer programming done in the demonstration version of SPIRES was judged to be suitable as the nucleus for the Stanford Library Automation Project, and is to be used to provide more efficient internal processing of bibliographic information in the library. The major technical progress during 1968 was the completion of the SPIRES Supervisor, a special-purpose time-sharing system that serves multiple typewriter terminals. The designer, William Riddle, describes the specifications for the Supervisor in Appen-

dix I of this report. Also appended is the SPIRES reference manual, a guide to user procedures prepared by Richard Bielsker. (The 1967 annual report is ED 017 294, PB 177 087.)

Organization of a Capitol Region Library Council. A report on the Proposals and Activities of Neumann Associates. Hartford, Conn.: Capitol Region Council of Elected Officials. 24p. (Available from CFSTI as PB 184 039, MF—$0.65 HC—$3.00).

In 1967 the Regional Advisory Committee for the Capitol Region, Inc. of Hartford, Connecticut, commissioned a study by Nelson Associates entitled "Library Service in the Capitol Region of Connecticut: A Study with Recommendations for Future Development" (Ed 026 089). As a result of this report the Capitol Region Council of Elected Officials contracted with Neumann Associates to create a Capitol Region Library Council (CRLC). This report summarizes activities of the Neumann Associates in this effort including meetings of the Interim Council and discussions leading to a set of proposed bylaws for the CRLC. Possible programs are listed involving improved access to library resources by the citizens of the region, direct service to library users provided by the CRLC, the provision of centralized administrative services, improved public relations, and improvement of individual libraries in the region. Appendix I is a list of meetings, conferences, and appearances. Also appended are the recommended bylaws, a proposed budget, and the recommended dues schedule.

Reports of the Studies of the Publication Fate of Material Presented at National Meetings (Two Years After the Meetings). Baltimore, Md.: Johns Hopkins University Center for Research in Scientific Communication. 85p. (Available from CFSTI as PB 185 469, MF—$0.65 HC—$3.00).

Included in this document are seven reports dealing with the post-meeting journal publication of papers presented at various national meetings. The studies were all made two years after the meetings. The national meetings involved in the studies were: (1) October 1966 Meeting of the Optical Society of America; (2) 1966 Meeting of the American Sociological Association; (3) two meetings of the American Institute of Aeronautics and Astronautics; (4) 1967 Annual Meeting of the American Geophysical Union; (5) 96th Annual Meeting of the American Institute of Mining, Metallurgical and Petroleum Engineers; (6) 1967 Annual Meeting of the Association of American Geographers; and (7) two meetings of the American Meteorological Society.

Information Resources; A Searcher's Manual. MOREL Regional Information System for Educators. By George Grimes and James Doyle. Detroit: Michigan-Ohio Regional Educational Laboratory, Inc. 56p. (ED 034 559, MF—$0.25 HC—$2.90).

This document is one of a series describing the background, functions, and utilization of the Regional Information System (RIS) developed by the Michigan-Ohio Regional Educational Laboratory (MOREL). The purpose of this manual is to detail a procedure for performing a productive search of informational needs of educators. The focus of the manual is upon the individual researcher, but the methodology and materials delineated could be used within an organization as well. The manual is divided into two general sections. Chapter one discusses the searching procedure covering definition of the question, the information searching procedure, and the bibliographic chain. A search procedure form and a model of the searching process are also included. Chapter two deals in more detail with the various informational formats included in the bibliographic chain. Specific resources are listed and annotated, including human, institutional, and printed resources, and information agencies. The concluding section of the manual provides a listing of existing sources of these resources, the suggested contents of a basic educational reference collection, and a keyword index. A select-

ed bibliography of fourteen items on the searching procedure is appended.

Information Services; A Survey of the History and Present Status of the Field. MOREL Regional Information System for Educators. By George Grimes. Detroit: Michigan-Ohio Regional Educational Laboratory, Inc., 1969. 35p. (ED 034 560, MF—$0.25 HC—$1.85).

This document is one of a series describing the background, functions, and utilization of the Regional Information System (RIS) developed by the Michigan-Ohio Regional Educational Laboratory (MOREL). The continuing history of the field of librarianship and information services is reviewed in this report. The first part covers ancient times to the invention of movable type; the second extends from the advent of print to the end of the nineteenth century; and the third summarizes the period from 1900 to the present. The first two parts deal almost exclusively with library history, although the work of documentalists becomes a stronger and stronger trend from the last of the nineteenth century onwards. The emphasis in the last part is on the accelerating activities of the information services area as operationalized by those engaged in documentation, information retrieval, and the emerging discipline of information science. Appended are descriptions of the information service efforts of four regional educational laboratories: the Far West Laboratory for Educational Research and Development, the Michigan-Ohio Regional Educational Laboratory, the Central Midwestern Regional Educational Laboratory, and the Southwestern Cooperative Educational Laboratory.

Establishing the Information System: An Operational Handbook. MOREL Regional Information System for Educators. By Charles Kromer and James Doyle. Detroit: Michigan-Ohio Regional Educational Laboratory, Inc., 1969. 65p. (ED 034 561, MF—$0.50 HC—$3.35).

This document is one of a series describing the background, functions, and utilization of the Regional Information System (RIS), developed by the Michigan-Ohio Regional Educational Laboratory (MOREL). RIS, which was developed to improve the accessibility of information for the educational practitioner, is described in this handbook. The handbook is also designed to help others plan, develop, and operate information systems. Included in the handbook are: (1) an introduction to RIS; (2) a detailed description of the system's two components: the Resource Bank and the Referral Library; (3) information on installation activities; (4) discussions of staffing, facilities, costs, the timetable, and evaluation; and (5) a summary of the evolution of the system. Appendixes include: the Resource Bank coding scheme, the Association Referral Information Service (ARIS) coding scheme, a list of suggested materials for a basic referral library collection, a sample numeric subclassification system, Keyword in Context (KWIC) listings, the MOREL search procedure form, a sample data sheet, and an annotated list of selected collections of materials in the MOREL Information Center's information file.

Studies in Public Library Government, Organization, and Support. Final Report. By Guy Garrison. Illinois University, Urbana: Library Research Center, 1969. 538p. (ED 034 567, MF—$2.00 HC—$27.00).

This report consists of six individual reports that were done by staff members at the Library Research Center as part of the overall project. In Part I, "Financing Public Library Expansion: Case Studies of Three Defeated Bond Issue Referendums," Ruth G. Lindahl and William S. Berner analyze defeated library bond issue referendums in Champaign, Quincy, and Peoria, Illinois. In Part II, "Suburban Communities and Public Library Service in the Chicago Metropolitan Statistical Area," Ruth G. Lindahl tests the proposition that certain types of suburban communities will have predictably higher levels of public library service than will others. For Part III, "Public Opinion in Illinois Regarding Public Library Support and Use" by Carol Kronus and James W. Grimm, field inter-

views were conducted with 2,031 respondents representing a probability sample of adult residents of Illinois. In Part IV, William S. Berner examines "Campaign Conduct and the Outcome of Library Bond Referendums." Barbara O. Slanker, in Part V, is concerned with "Administrative Structure of Public Library Systems and Its Relationship to Level of Service Offered by Member Libraries." In Part VI, Ralph Stenstrom presents an analysis of "Factors Associated with Membership and Nonmembership in Library Systems in Illinois."

The Cost of Maintaining and Updating Library Card Catalogs. Final Report. By J. L. Dolby and others. Los Altos, Calif.: R and D Consultants, 1969. 127p. (ED 035 432, MF—$0.50 HC—$6.45. A related document is ED 022 517).

The main problem considered in this project is whether it will be possible for civilization to cope with the increasing quantities of archival information that must be stored in libraries, and if so, whether traditional methods of identification and access will prove adequate to the task. It is concluded that unless the storage, transmission, and retrieval of information in library archives is automated, there is no hope of keeping pace with the exponential growth of libraries. Part I explores the problem of determining the relationship of library growth to the growth of those components of civilization that support and use libraries. Part II analyzes cost factors in maintaining and updating card catalogs. It was found that simple situations do not require automation, but that complex ones, which appear unavoidable for most large libraries, demand automation on economic as well as on access grounds.

A Computer Based System for Reserve Activities in a University Library. By Paul J. Fasana and others. Columbia University, N.Y.: The Libraries, 1969. 109p. (ED 035 431, MF—$0.50 HC—$5.55).

After a detailed study of the reserve processing activities of the Columbia University Library System, it was decided that an attempt to design a reserve system which would make the fullest use of computers would be undertaken. This would be an integrated system developed over a period of time in a series of clearly defined phases. Three different phases were distinguished which could be developed in series or simultaneously, depending on such factors as operating software and hardware availability. After three years a fully tested system, called Reserves Processing has been developed for Phase One and implemented in two working environments. The Reserves Processing system accepts input in the form of brief bibliographic citations, inventory data and course information, creates a master machine stored reserve file, produces a variety of records to assist in the processing of reserve books, and prints a variety of lists to be used for reference purposes. All of these operations, except input, are done as off-line, batch-processed operations. Only input is done in an on-line mode. This report includes a general systems description intended for the nontechnical reader as well as program and hardware specifications intended for the technical reader.

Cost and Time Analysis of Monograph Cataloging in Hospital Libraries: A Preliminary Study. By Linda Angold. Detroit: Wayne State Univ., Library and Biomedical Information Service Center, 1969. 23p. (ED 035 428, MF—$0.25 HC—$1.25).

The purpose of this paper is: (1) to propose models to be used in evaluating relative time and cost factors involved in monograph cataloging within a hospital library, and (2) to test the models by performing a cost and time analysis of each cataloging method studied. To establish as complete a list of cataloging work units as possible, several hospital catalogers in the Detroit area were interviewed to learn the pattern of steps they follow. A checklist of cataloging work was then prepared to test the following possible approaches to cataloging: (1) original cataloging, using either Library of Congress (LC) or National Library of Medicine (NLM) systems, (2) cataloging with LC cards, (3) cataloging with (LC) cards, but utilizing NLM subject headings, (4) cataloging with LC

proofcopy, and (5) cataloging from NLM bibliographic information. Data for the cost-time analysis was collected during March of 1969 at the Wayne State University School of Medicine Library (WSUML). Fifty titles considered suitable for a hospital library were cataloged using each of the above approaches. The different cataloging methods measured are discussed in relation to the hospital library situation. For each method there is a table listing the time and cost values for every work unit with alternatives available within each method.

A Systems Analysis of the Library and Information Science Statistical Data System: The Preliminary Study. Interim Report. By Morris Hamburg and others. Philadelphia: Pennsylvania University. 55p. (ED 035 421, MF—$0.25 HC—$2.85).

The long-term goal of this investigation is to design and establish a national model for a system of library statistical data. This is a report on The Preliminary Study which was carried out over an eleven-month period ending May 1969. The objective of The Preliminary Study was to design and delimit The Research Investigation in the most efficient and meaningful way. The Preliminary Study concentrated on (1) the background research required to determine the nature and relevance of previous and ongoing research in this field and (2) the design of The Research Investigation. The Preliminary Study included a literature search and intensive review of relevant research; interviews with a wide variety of librarians, officials of library associations, government officials, and university researchers; and other activities relevant to the construction of the design of The Research Investigation. This final report primarily consists of a proposal for The Research Investigation and a summary of a background study on "Statistical Measures Required for Library Managerial Decision Making Under a Planning-Programming-Budgeting-System (PPBS)." This background study was a masters thesis by Jerome Ackerman (University of Pennsylvania), partially supported under the grant for The Preliminary Investigation. Appended are a 101-item bibliography and library benefit-cost management model.

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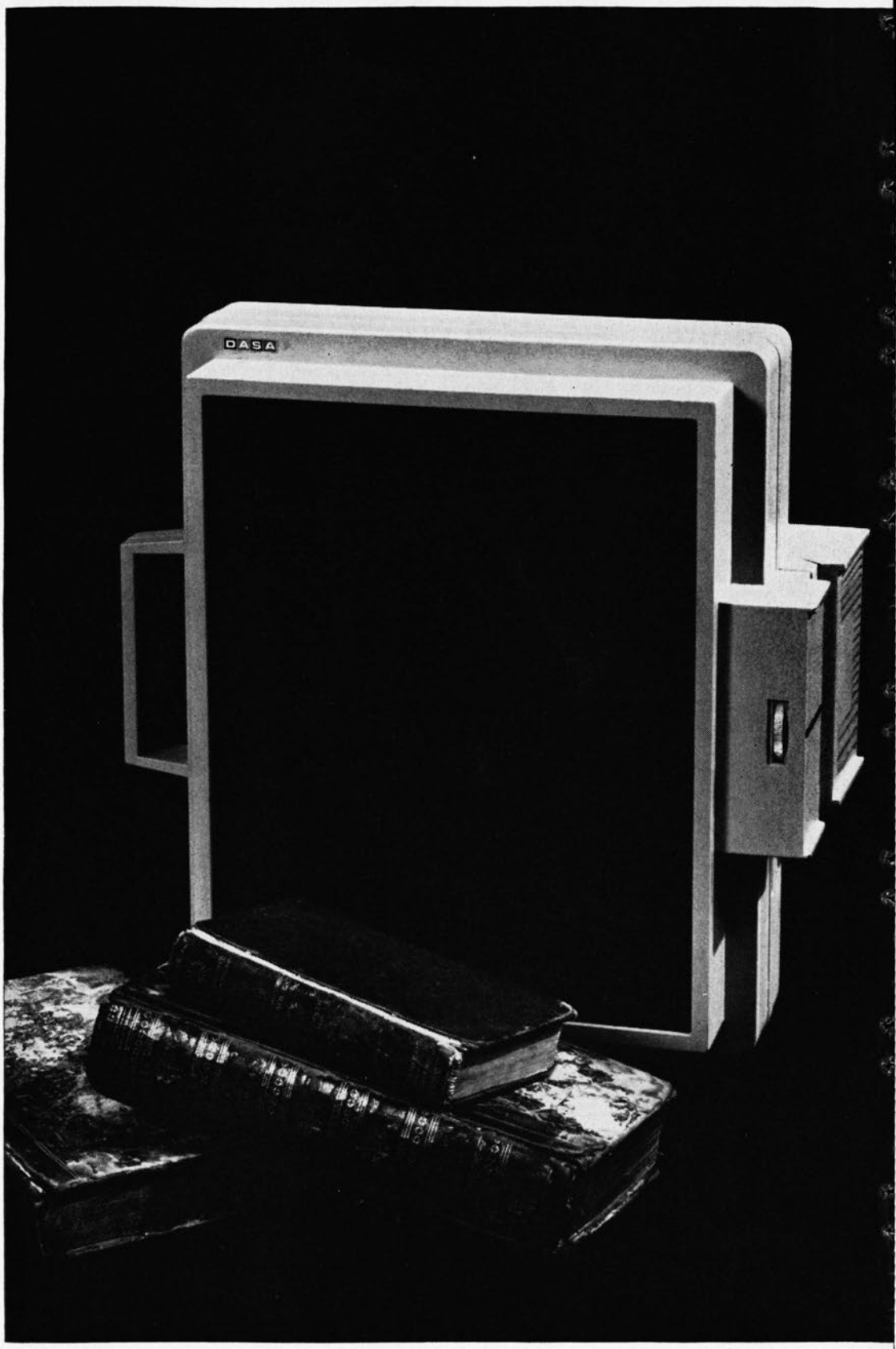
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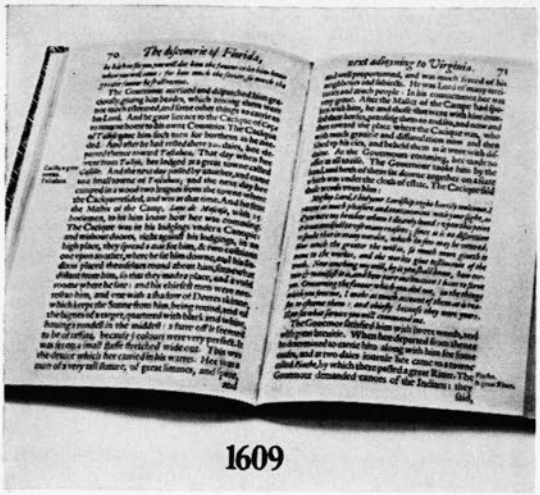

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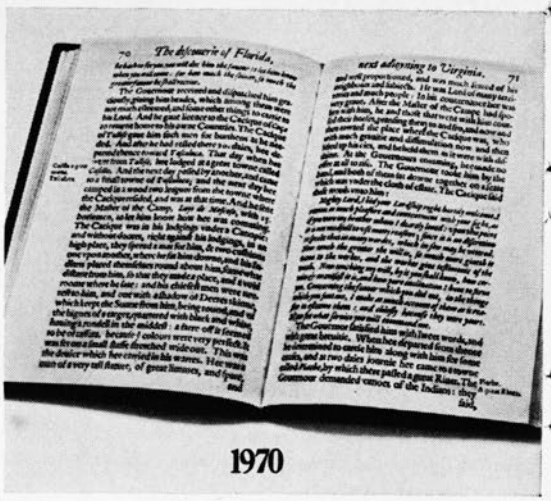

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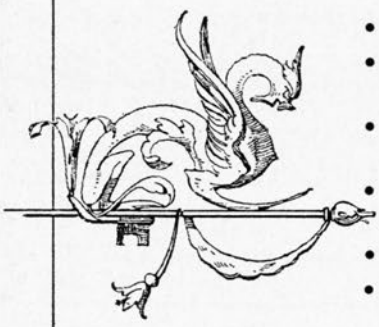

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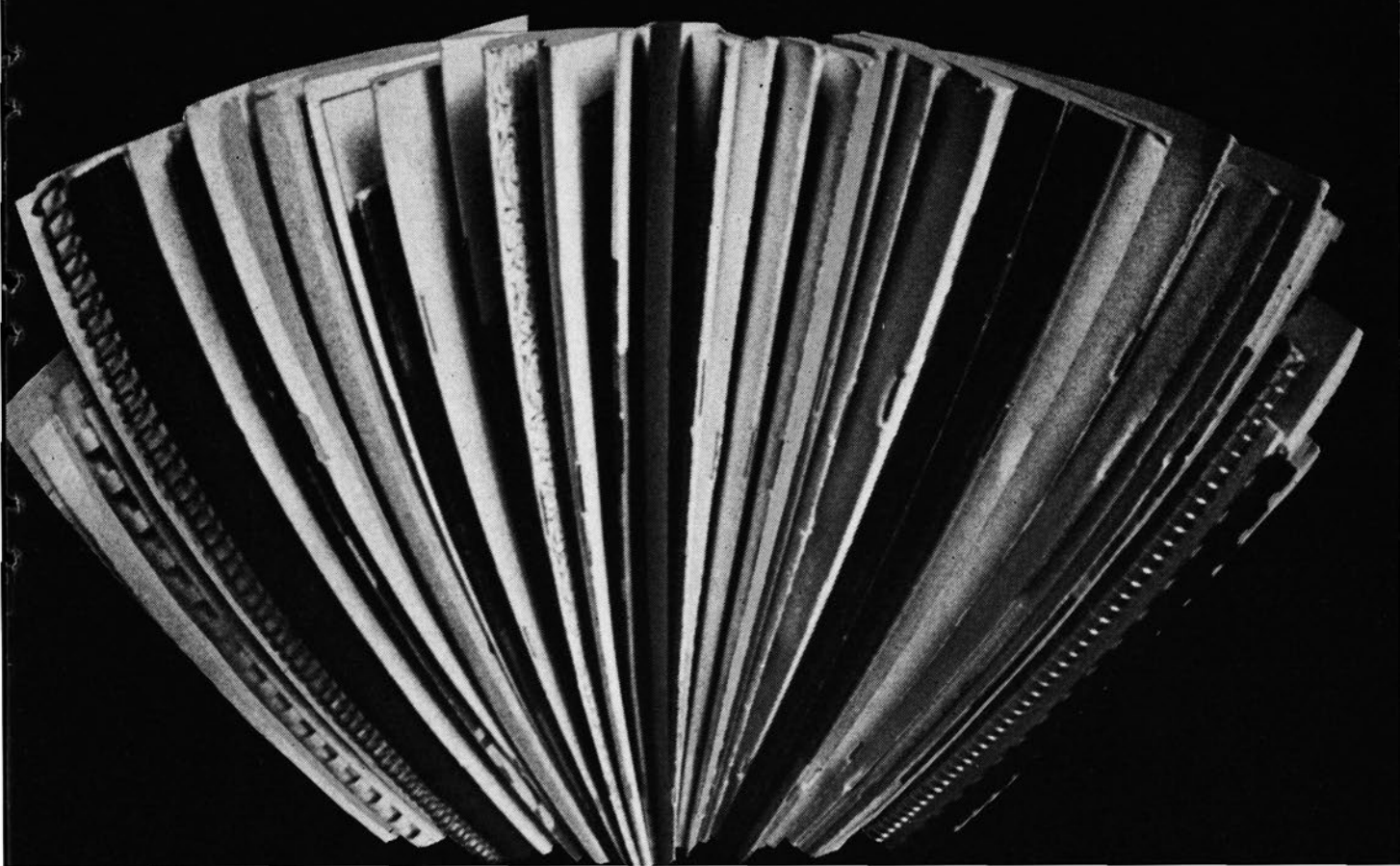

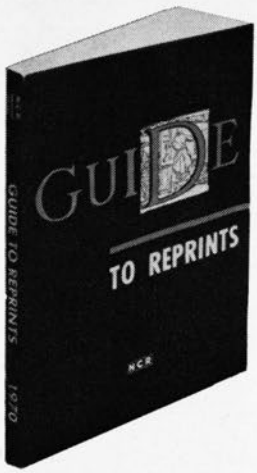

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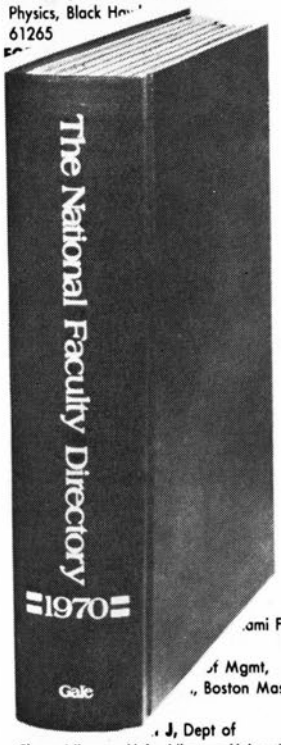

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